CITY OF BLOOMINGTON

BOARD OF ZONING APPEALS

February 17, 2022 @ 5:30 p.m.

https://bloomington.zoom.us/j/89654638337?pwd=UGFETnM4VHJWREN1bkN0OWhiaDJHQT09

Meeting ID: 896 5463 8337
Passcode: 267972

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❖Virtual Meeting:

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Meeting ID: 896 5463 8337
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PETITION MAP:

ROLL CALL

APPROVAL OF MINUTES: October 21, 2021
November 18, 2021
**No minutes for December 23, 2021 (hearing cancelled)

REPORTS, RESOLUTIONS, AND COMMUNICATIONS:

ELECTION OF OFFICERS:

- Current President: Barre Klapper
- Current Vice-President: Jo Throckmorton

PETITIONS:

CU-22-21 **Aidan Reef** (Cont. from 12/23 hearing)
1808 S. Rogers St.
Request: Conditional Use approval to allow the operation of a home bakery business in the R2 (Residential Medium Lot) zoning district.
Case Manager: Jackie Scanlan

V-23-21 **WS Property Group** (Cont. from 12/23 hearing)
106 E. Hillside Dr.
Request: Variance from the required 20' front yard parking setback for the proposed construction of five 3-bedroom townhomes in the RM (Residential Multifamily) zoning district.
Case Manager: Jackie Scanlan

CU-24-21 **WS Property Group** (Cont. from 12/23 hearing)
106 E. Hillside Dr.
Request: Conditional Use approval to construct one building consisting of five 3-bedroom townhomes in an RM (Residential Multifamily) zoning district.
Case Manager: Jackie Scanlan

****Next Meeting: March 24, 2022**

Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call 812-349-3429 or e-mail human.rights@bloomington.in.gov.

V-01-22 **Catalent Indiana, Inc.**
1600 S. Rogers St.
Request: Variance from fence and wall standards, riparian buffer standards, and front parking setback standards to allow the construction of a new parking area.
Case Manager: Eric Greulich

V-02-22 **Catalent Indiana, Inc.**
1100 S. Strong Dr.
Request: Variance from fence and wall standards, and Variance from architectural standards to allow an addition.
Case Manager: Eric Greulich

****Next Meeting: March 24, 2022**

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BLOOMINGTON BOARD OF ZONING APPEALS **CASE#: CU-22-21**
STAFF REPORT **DATE: February 17, 2022**
LOCATION: 1808 S Rogers St

PETITIONER: Aidan Reef
1808 S Rogers St
Bloomington, IN 47403

REQUEST: The petitioner is requesting conditional use approval for a home occupation.

REPORT: The property is located on the west side of S Rogers Street and is zoned R2 Residential Medium Lot. The property has been developed with a single family residence. The properties to the south and west are also single-family residences. The property to the east is developed with a park. The property to the north is developed with utility and industrial uses. The petitioner lives in the home and wishes to conduct a bakery as a home business. The proposed business would use the kitchen on the property for baking goods to be sold at the local farmer's markets. This use requires approvals from City of Bloomington Utilities and the Monroe County Health Department. The entirety of the business operation would be contained in the existing structure.

HOME OCCUPATION STANDARDS: BMC 20.03.030(g)(6) lists use-specific standards for home occupations, as follows:

1. Operator Residency Required: The petitioner lives in the home.
2. Maximum Number of Nonresident Employees: The petitioner is the only employee.
3. Maximum Floor Area: The interior area of the house is approximately 2,194 square feet. The petitioner plans to use 234 square feet for the home occupation which is 12% of the interior. This meets the restriction that no more than 15% of the interior square footage will be used for the home occupation.
4. Multiple Home Occupations: Only one home occupation is planned.
5. Residential Character: The petitioner will not be making any additional changes to the exterior of the residence with this request.
6. Location and Entrance: The home occupation will take place entirely within the house.
7. Outdoor Display and Storage: No outdoor display is planned or permitted.
8. Sales: No direct sales are planned or permitted.
9. Off-street Parking and Loading: The existing driveway will serve as parking for the home occupation, but no on-site sales are planned.
10. Hours of Operation: The petitioner is aware of the limitation on the hours of operation of 8:00 AM to 8:00 PM and will not operate outside of these hours.
11. Commercially Licensed Vehicles: No commercial vehicles are proposed.
12. Deliveries: No deliveries are anticipated with this use outside of those typical for a residential use.

Criteria and Findings for Conditional Use Permits

20.06.040(d)(6) Approval Criteria

(B) General Compliance Criteria: All petitions shall be subject to review and pursuant to the following criteria and shall only be approved if they comply with these criteria.

i. Compliance with this UDO
ii. Compliance with Other Applicable Regulations
iii. Compliance with Utility, Service, and Improvement Standards
iv. Compliance with Prior Approvals

PROPOSED FINDING: The petition complies with the UDO, other applicable regulations, and utility, service, and improvement standards as required by the general compliance criteria. No prior approvals are found. The petitioner will be required to comply with CBU and Health Department regulations for this use.

(C) Additional Criteria Applicable to Conditional Uses

i. Consistency with Comprehensive Plan and Other Applicable Plans

The proposed use and development shall be consistent with and shall not interfere with the achievement of the goals and objectives of the Comprehensive Plan and any other applicable adopted plans and policies.

PROPOSED FINDING: The Comprehensive Plan identifies this area as "Neighborhood Residential" and lists single family residential development as the primary land use with some additional uses permitted, including commercial and mixed-use. This home occupation will have no outward signs of any use separate from a typical single-family household. A home occupation would be consistent with the goals of this district.

ii. Provides Adequate Public Services and Facilities*Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.*

PROPOSED FINDING: The petitioner will be required to meet CBU requirements for home occupations. Direct retail sales are not permitted on the property so no increase in vehicle or pedestrian traffic is expected with this use.

iii. Minimizes or Mitigates Adverse Impacts

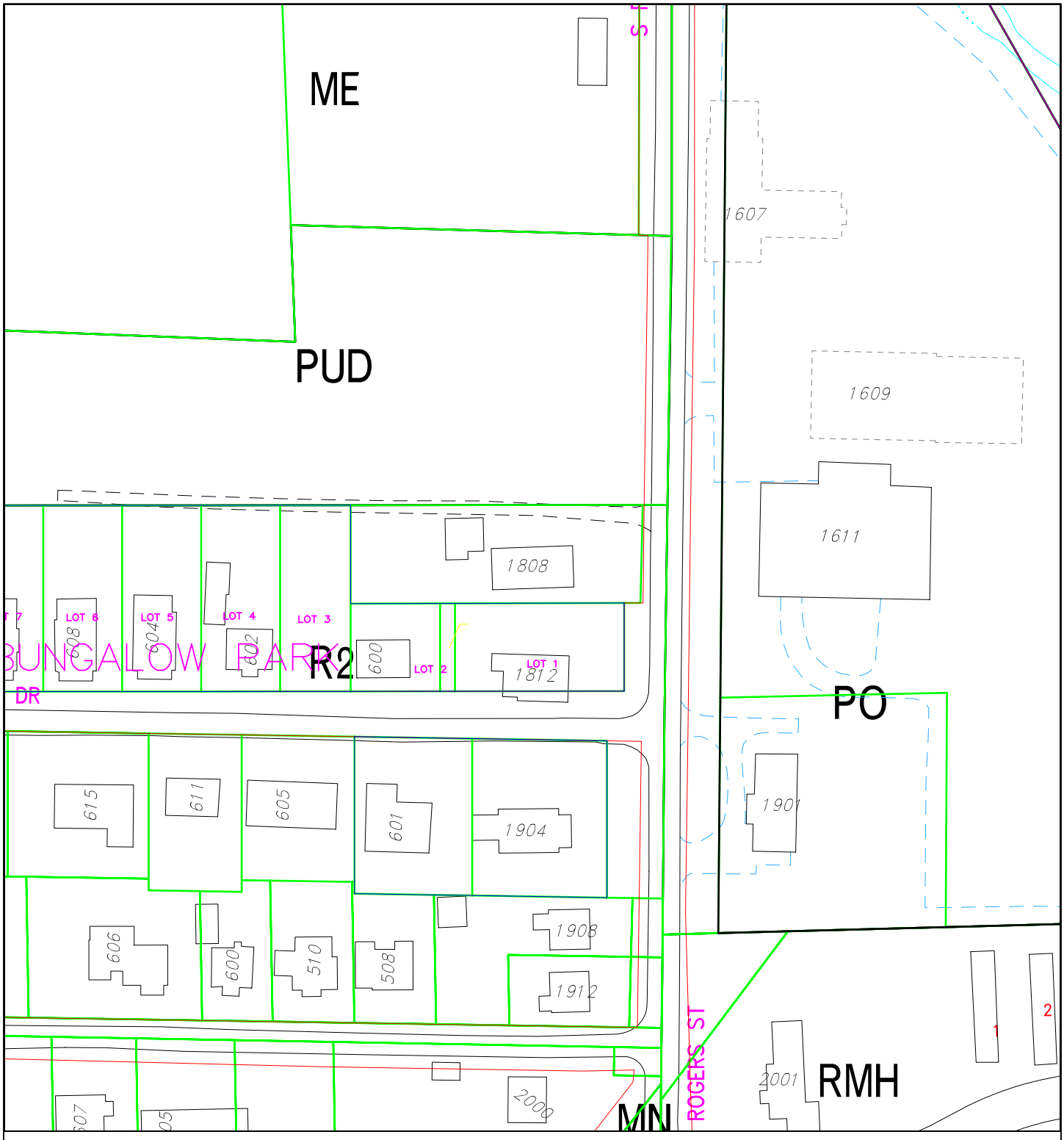
1. *The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.*
2. *The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors, vibrations, or objectionable lights.*
3. *The hours of operation, outside lighting, and trash and waste collection must not pose a hazard, hardship, or nuisance to the neighborhood.*

4. *The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.*

PROPOSED FINDING: No exterior changes are being proposed with this home occupation. No additional lighting will be required for this proposed home occupation. Staff finds no nuisance regarding noise, smoke, odors, vibrations, or lighting. No special lighting or unusual hours of operation are proposed with this request. The business will not operate before 8:00 AM or after 8:00 PM. At this time, we have not received any comments from adjacent property owners regarding this petition.

RECOMMENDATION: Department recommends that the Board of Zoning Appeals adopts the proposed findings and recommends approval of CU-22-21 with the following conditions:

1. This conditional use is limited to the proposed use as described in the petitioner statement, no other use is approved.
2. The petitioner must meet all City of Bloomington Utilities standards before the Conditional Use permit is issued.
3. The petitioner must meet all Monroe County Health Department standards before the Conditional Use permit is issued.



City of Bloomington
Planning

By: keegan.gulick
16 Dec 21

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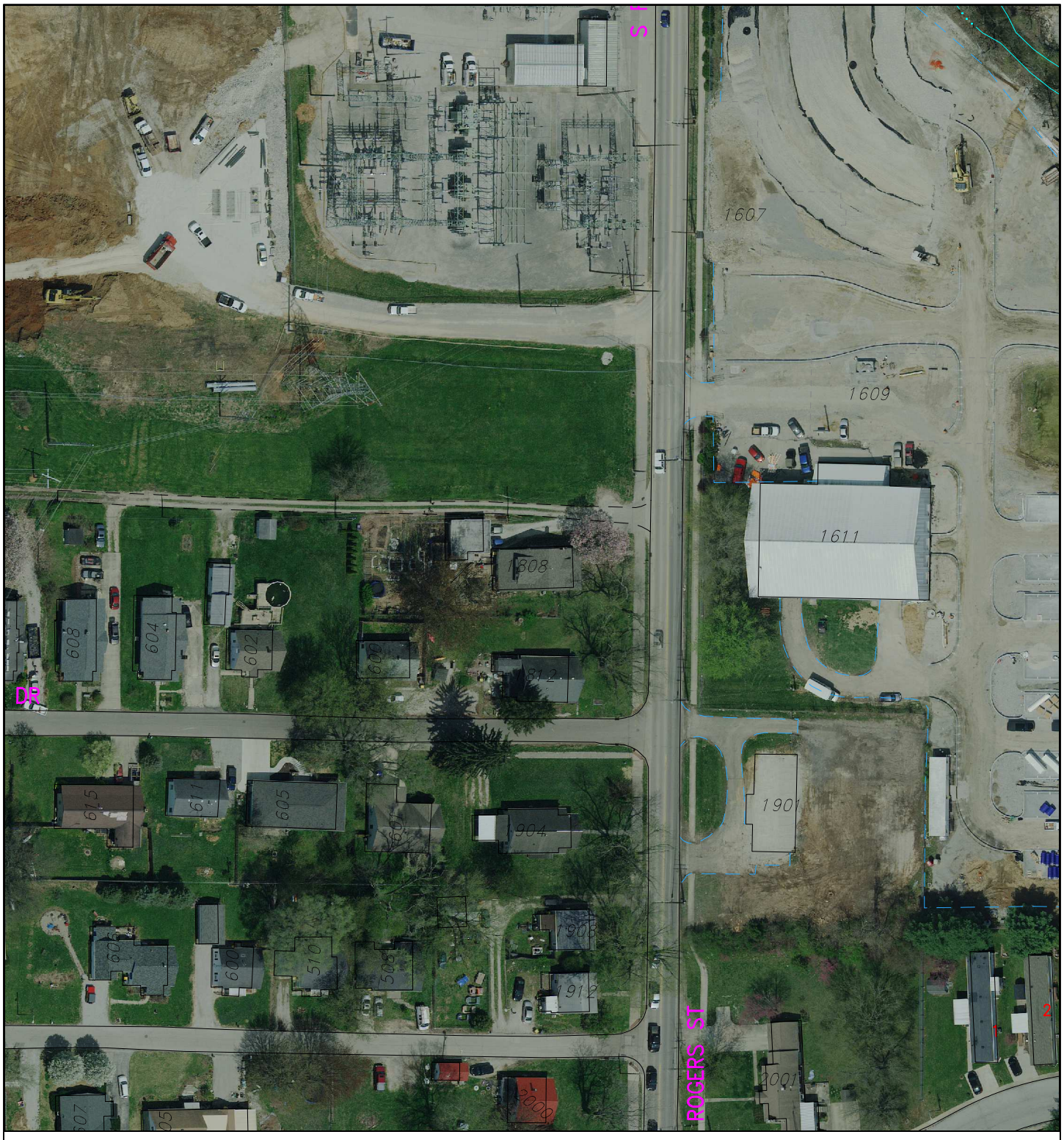
Scale: 1" = 100'

For reference only; map information NOT warranted.



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By: keegan.gulick
16 Dec 21

100 0 100 200 300

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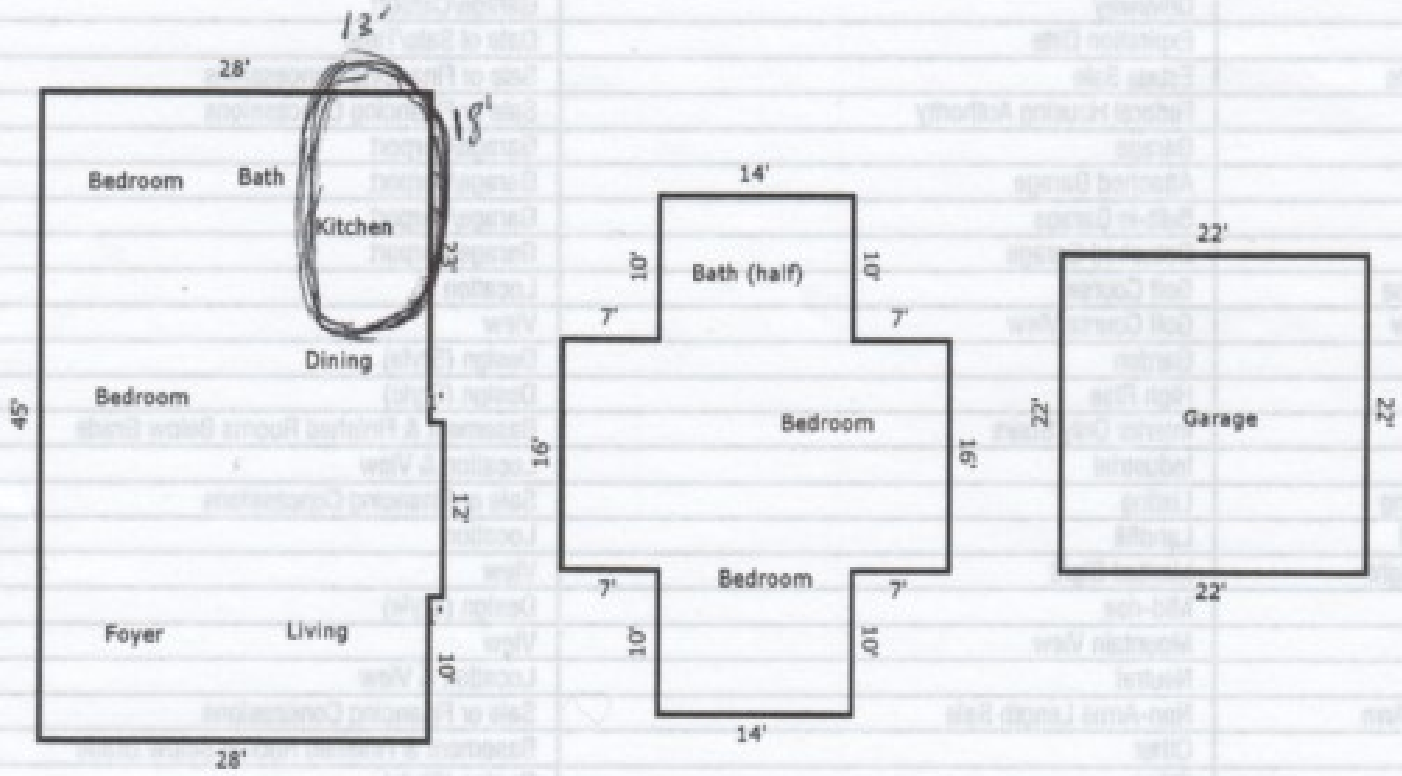
I am writing this petitioner's statement with the intent of obtaining home occupation approval for my Home-Based Vending business Frostfall Baked Goods located at 1808 S Rogers St.

The business uses the home kitchen, which is 13' x 18' and is located in the back of the house. All items that are baked and sold fall under the Monroe County Health Departments guidelines for Home Based Vending and IN code 16-42-5-29. All items are sold through farmer's markets. The only area on the property that is used for the business is the kitchen. Baking happens between 5am and 11pm every Friday in preparation for markets on Saturday. Baking also happens throughout the week, between the hours of 5am and 5pm. All cooking and preparation surfaces are thoroughly cleaned before and after each baking session. The business will not produce any loud noises nor any other nuisances to adjacent properties as all work is done inside the building.


13'
28'
15'
Bedroom
Bath
Kitchen
22'
Dining
45'
Bedroom
12'
Foyer
Living
10'
28'
14'
10'
Bath (half)
10'
7'
7'
16'
Bedroom
16'
7'
Bedroom
7'
10'
10'
14'
22'
22'
Garage
22'
22'

BLOOMINGTON BOARD OF ZONING APPEALS **CASE #: V-23-21**
STAFF REPORT **DATE: February 17, 2022**
LOCATION: 106 E Hillside Drive

PETITIONER: WS Property Group
1507 S Piazza Drive,
Bloomington, IN 47401

REQUEST: The petitioner is requesting a variance from the required 20-foot front yard parking setback for the construction of five, 3-bedroom townhomes in the RM (Residential Multifamily) zoning district.

REPORT: The property is located at 106 E Hillside Drive and is zoned Residential Multifamily (RM) and is currently vacant as the previous home was demolished. The properties to the east and south are also zoned RM and have been developed with single-family and multifamily dwellings. The properties to the north across East Hillside Drive are zoned R3 and have been developed with detached single-family dwellings. The properties to the west are zoned MM and have been developed with single-family dwellings. Currently on the site there is a retaining wall that spans the entire site along Hillside Drive. The petitioner is proposing to construct a 5-unit structure on the site.

The Unified Development Ordinance (UDO) classifies this use as "Student Housing or Dormitory" due to the fact that more than 33% of the dwelling units have 3 bedrooms. For the use 'Student Housing or Dormitory', 20.03.030(b)(13)(A) in the UDO requires that any portions within the ground floor of a structure used for vehicular parking shall be located at least 20 feet behind the building façade facing a public street. The petitioner is requesting a variance to allow parking that encroaches into the 20 foot setback.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.09.130 e) Standards for Granting Variances from Development Standards: A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) *The approval will not be injurious to the public health, safety, morals, and general welfare of the community.*

PROPOSED FINDING: No adverse effect to the use or value of the adjacent properties is found as a result of this variance. The proposed use is required to obtain conditional use approval.

2) *The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.*

PROPOSED FINDING: No adverse impacts to the use and value of adjacent properties is found as a result of this petition. The variance will allow for adequate parking on-site. The improvements

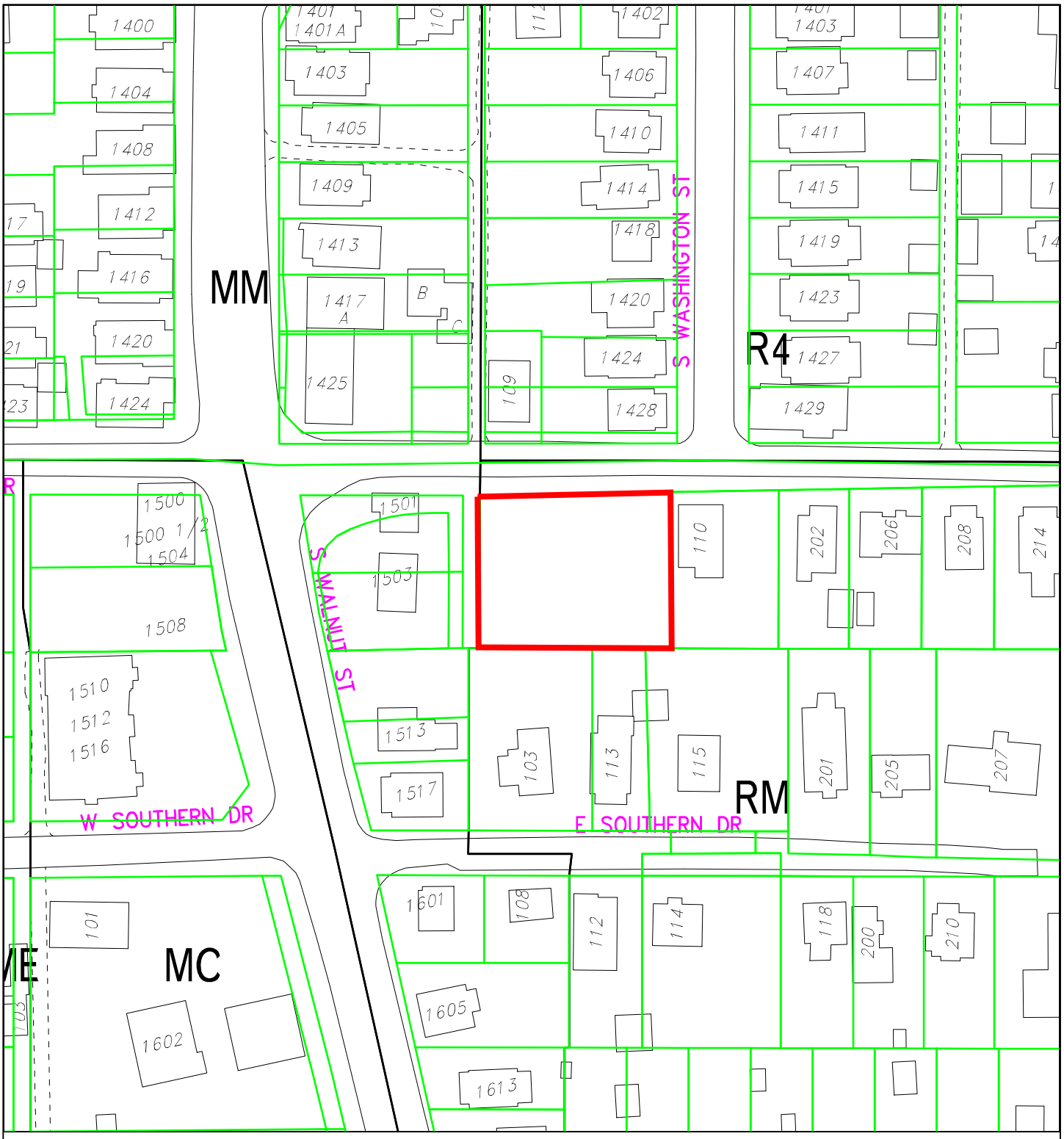
to the sidewalk and tree plot will provide a more pedestrian friendly streetscape than what is currently existing. The site is currently a vacant lot with a large retaining wall along the sidewalk.

3) *The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.*

PROPOSED FINDING: Practical difficulty is found in the combination of the size of the lot and the lack of on-street parking available. The lot would not allow for the construction of adequate on-site parking behind the building that would meet setback and dimensional requirements. Parking in the building that is adequate for the use is not possible while also meeting the front parking setback. No on-street parking is available on Hillside, and ground floor parking is typical for a development of this type.

RECOMMENDATION: Based upon the written findings above, the Department recommends that the Board of Zoning Appeals adopt the proposed findings and recommends approval of V-23-21 with the following conditions:

1. A grading permit is required before earth moving beings
2. The petitioners must obtain a building permit prior to construction.



City of Bloomington
Planning

By: keegan.gulick
17 Nov 21

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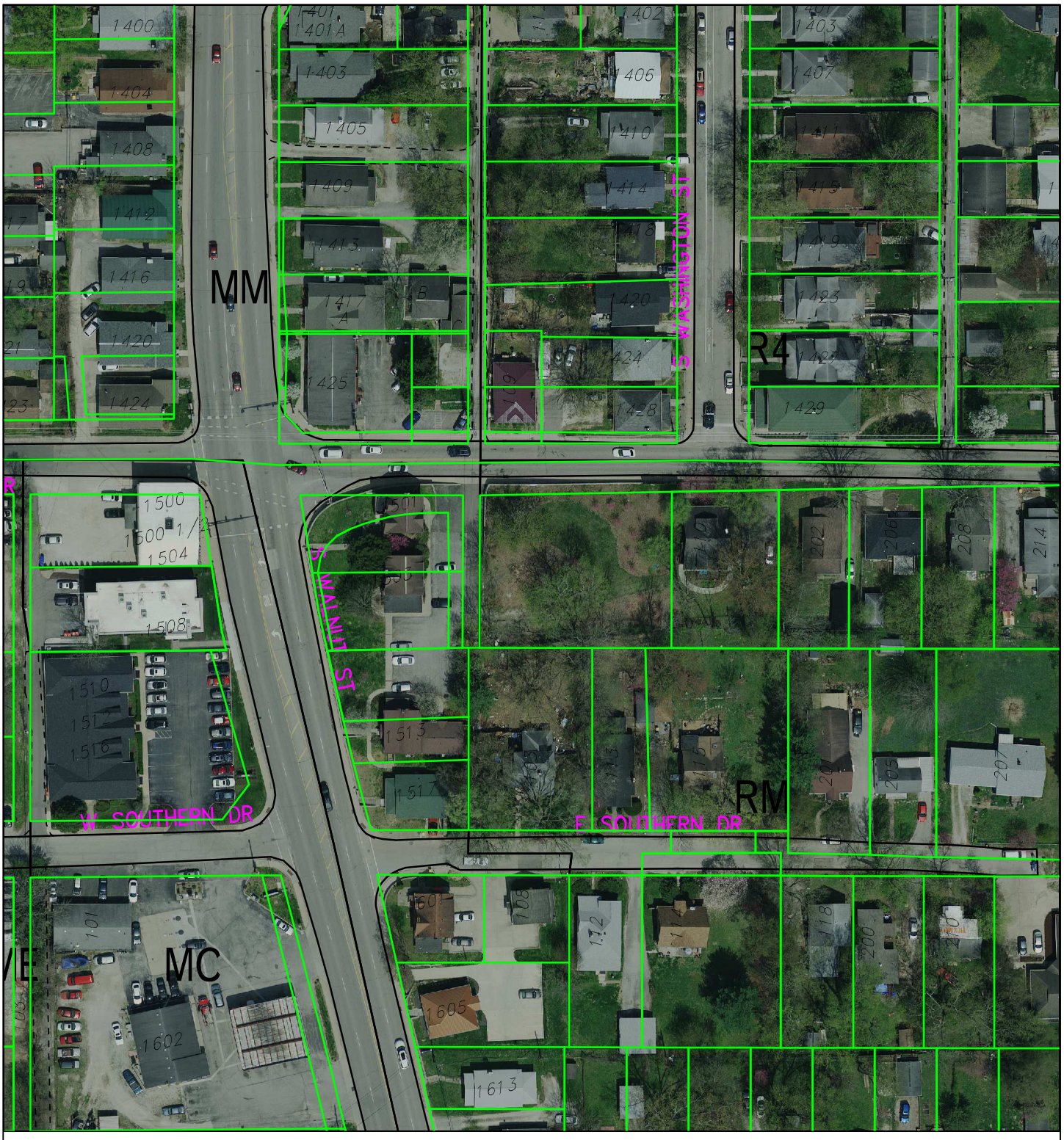
Scale: 1" = 100'

For reference only; map information NOT warranted.



City of Bloomington
Planning

By: keegan.gulick
17 Nov 21

100 0 100 200 300

Scale: 1" = 100'

For reference only; map information NOT warranted.

WS Property Group
1507 South Piazza Drive
Bloomington, IN 47401
office: 812.332.9575
fax: 812.332.0261
www.WSPropertyGroup.com

December 16, 2021

Keegan Gulick
City of Bloomington Planning and Transportation Dept.
401 N. Morton Street
Bloomington, IN. 47402

RE: 110 Hillside Drive – Variance Parking Setback with-in a building.

Dear Keegan,

WS Property Group is proposing to redevelop a vacant lot at 110 E Hillside Drive. We are requestioning a variance from 20.04.0?0(?) to allow a garage on the lower level of a townhome.

The project anticipates the construction of a single building comprised of 5 townhomes. Each townhome is comprised of 3 levels; parking, main-living, and bedroom. Recent changes in the Code make it illegal to park on the first floor of a building unless the garage wall is 20 feet behind the front wall of the building. We believe this "buffering" is unnecessary and creates an undue burden for a townhome type building.

We feel the approval of this variance will not be injurious to the public, nor adversely affect the use and value of the adjacent properties.

Please find attached the required information to render your approval.

Respectfully,
***WS*Property Group**

Timothy A. Hanson
V.P. Development

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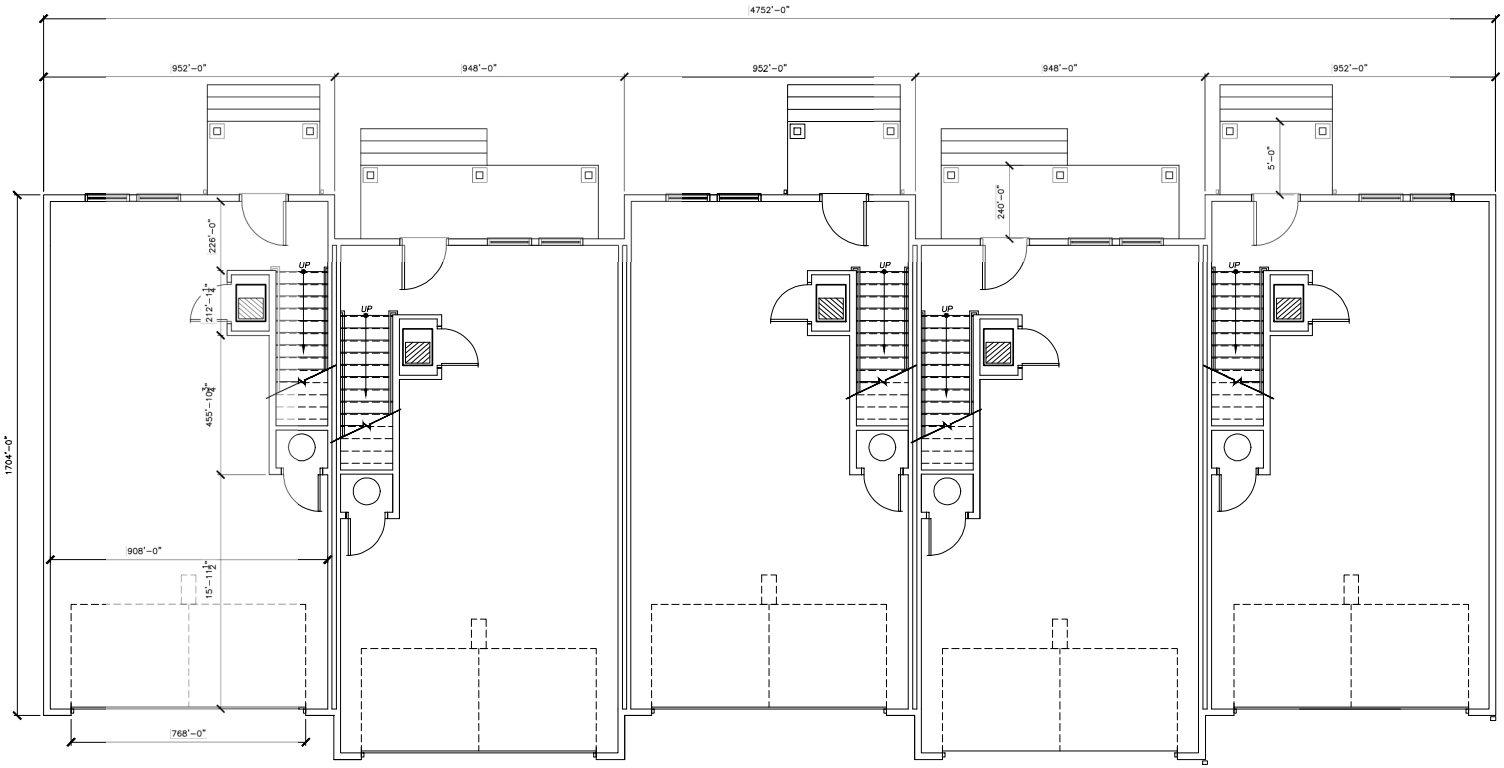

1 **FLOOR PLAN - FIRST FLOOR**
1/4" = 1'-0"

N

GENERAL FLOOR PLAN NOTES:

- DO NOT SCALE DRAWINGS, DIMENSIONS SHALL PREVAIL. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS RELATED TO THE WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. IF CONTRACTOR FAILS TO VERIFY DIMENSIONS AS INDICATED, ANY & ALL CORRECTIVE ACTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL INTERIOR DIMENSIONS ARE SHOWN STUD TO STUD & DO NOT INCLUDE WALL FINISHES.
- ALL DOOR OPENINGS SHALL BE LOC. 4" FROM ADJOINING WALL U.N.O.
- FIELD VERIFY PLAN DIMENSIONS PRIOR TO ANY CASEWORK FABRICATION.
- ALL NEW WALLS SHALL BE FINISHED TO MATCH EXIST. SURFACES INCLUDING PRIMER & PAINT.
- CAULK ALL JOINTS BETWEEN DIFFERENT MATERIALS IE: GYP. BD. & MASONRY.
- ALL WINDOWS WITHIN 24" OF ANY DOOR (REGARDLESS OF WALL PLANE), & WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE FLOOR OR WALKING SURFACE SHALL HAVE TEMPERED GLAZING.
- IF NO WINDOW SCHEDULE IS PRESENT, CONTRACTOR/OWNER SHALL PROVIDE A MIN. OF 1 CODE COMPLIANT EGRESS WINDOW IN EVERY SLEEPING ROOM.
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- SIZE OF STAIR RISERS MAY VARY ACCORDING TO SIZE OF FLR. SYSTEM.

FLOOR PLAN NOTES:

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- ALL FRAMING WORK IS TO BE DIRECTLY SUPERVISED BY A QUALIFIED, EXPERIENCED CARPENTER. MIN. INDUSTRY STANDARDS FOR PLUMB & LEVEL WALLS WILL BE EXPECTED FOR ALL WORK.
- REFER TO FLOOR PLANS FOR BALANCE OF DIMENSIONS & INFO.
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FLOOR PLAN KEYNOTES:

1 UNIT SEPARATION WALL TO BE (2) – 1 HOUR RATED FIRE WALL CONSTRUCTION CONTINUOUS FROM LOWER LEVEL TO ROOF DECK.

TABOR BRUCE
ARCHITECTURE & DESIGN INC.
1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
TELEPHONE: (812) 333-4258 WEB: WWW.TABORBRUCE.COM

REVISIONS

NEW TOWNHOME BUILDING FOR:

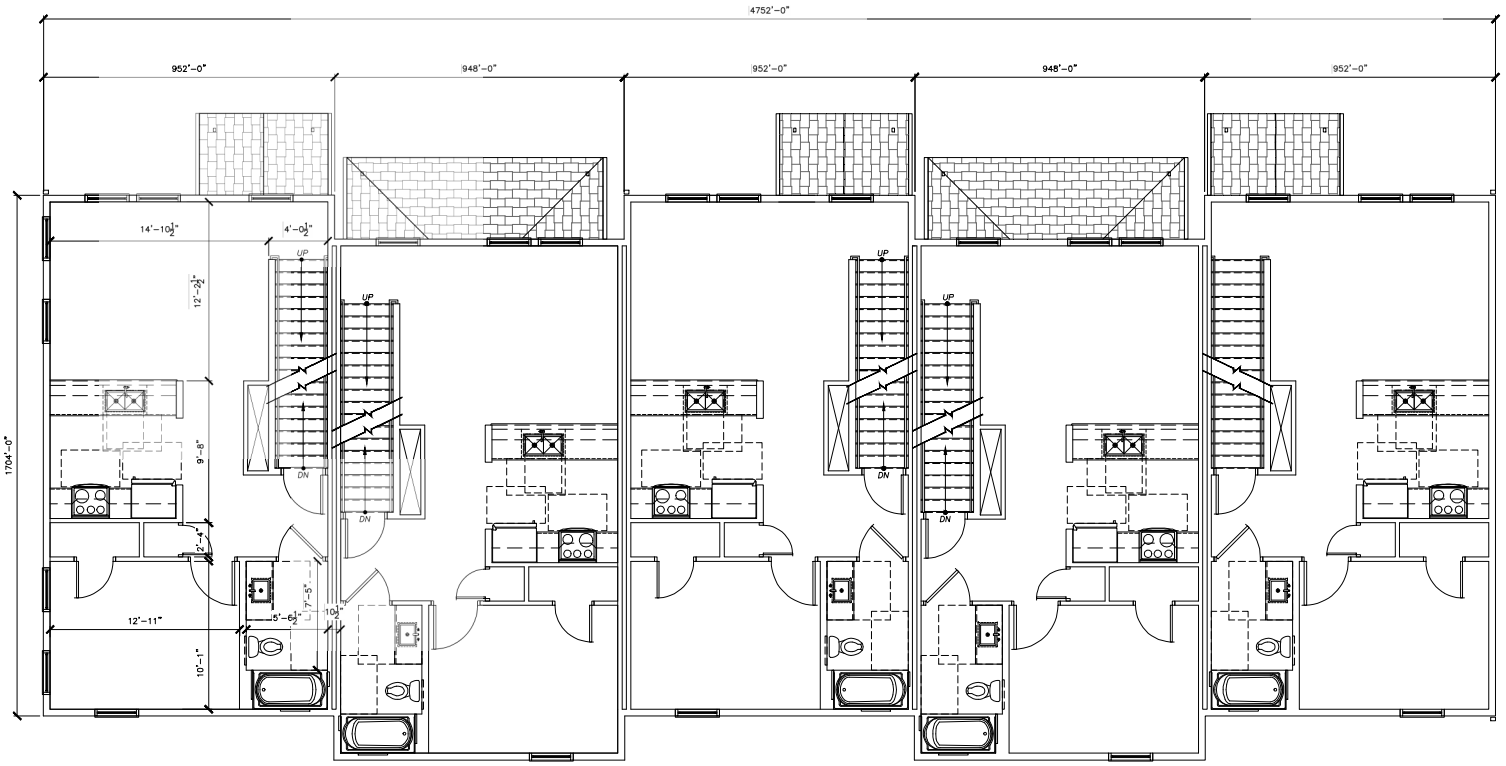
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	1821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
FIRST LEVEL
FLOOR PLAN
3-UNIT

SHEET NO.
AE101

17



1 FLOOR PLAN - SECOND FLOOR
1/4" = 1'-0"

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2. INSTALL GUARDRAIL ALONG ALL PORCHES/DECKS IF GREATER THAN 30" TO FINISHED GRADE

TABOR BRUCE
ARCHITECTURE & DESIGN INC.
1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
TELEPHONE: (812) 333-4255 WEB: WWW.TABORBRUCE.COM

REVISIONS

NEW TOWNHOME BUILDING FOR:

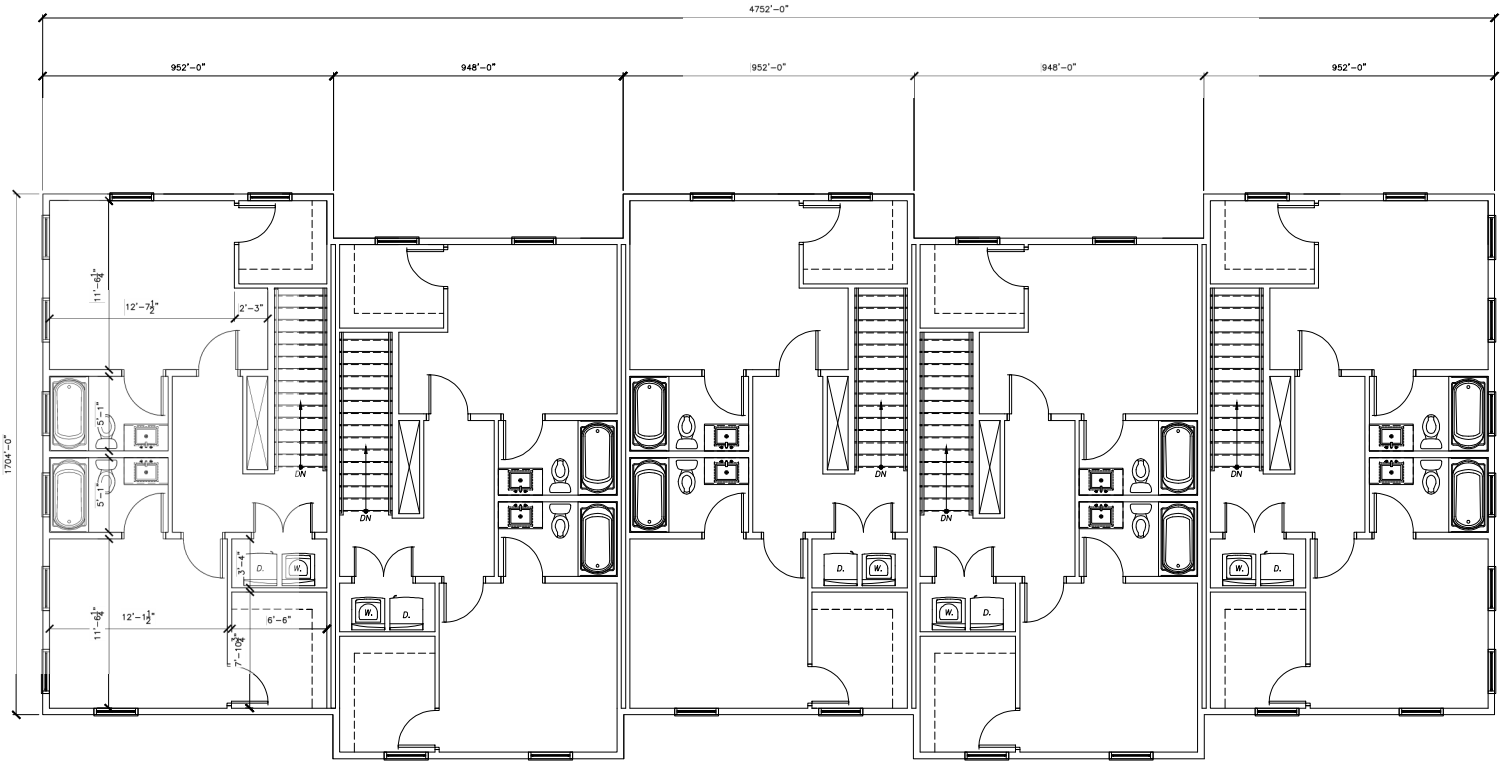
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
SECOND LEVEL FLOOR PLAN 3-UNIT

SHEET NO.
AE102

18



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- ANY RATED WALLS IF SHOWN, SHALL HAVE RATED OPENINGS WHERE THEY PENETRATE RATED WALL.

FLOOR PLAN KEYNOTES:

1. UNIT SEPARATION WALL TO BE (2) - 1 HOUR RATED FIRE WALL CONSTRUCTION CONTINUOUS FROM LOWER LEVEL TO ROOF DECK.
2. INSTALL GUARDRAIL ALONG ALL PORCHES/DECKS IF GREATER THAN 30" TO FINISHED GRADE

TABOR BRUCE
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1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
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REVISIONS

NEW TOWNHOME BUILDING FOR:

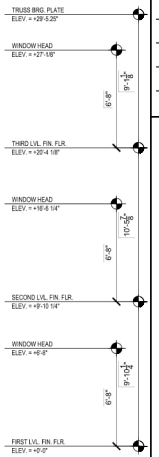
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
THIRD LEVEL
FLOOR PLAN
3-UNIT

SHEET NO.
AE103

19



1 **BUILDING NORTH ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
2. POURED CONC. FOUNDATION WALL AND CONC. FOOTING. SEE STRUCTURAL DWG'S.
3. PRIMED TRIM BD. @ SOFFIT. INSTALL & FLASH PER MFG'S. INSTRUCTIONS.
4. REINF. CONC. PORCH, FOUNDATION WALL & STEPS PER CURRENT APPLICABLE CODE TO GRADE.
5. FIBER CEMENT WRAPPED 2X PT. WD. FRAMED COLUMN BASE.
6. FIBER CEMENT WRAPPED PT. WD. PORCH COLUMN.
7. 4" NOMINAL BRICK.
8. HARDIPLANK PRIMED CEMENT BOARD LAPSIDING – 4" EXPOSURE. PAINT ALL EDGES AS REQUIRED. PROVIDE COLOR CHART. INSTALL PER MANUFACTURERS RECOMMENDATIONS. SEE INSTALLATION NOTES BELOW.
9. HARDIPLANK PRIMED CEMENT BOARD LAPSIDING – 8" EXPOSURE. PAINT ALL EDGES AS REQUIRED. PROVIDE COLOR CHART. INSTALL PER MANUFACTURERS RECOMMENDATIONS. SEE INSTALLATION NOTES BELOW.
10. VINYL CORNER TRIM. INSTALL & FLASH PER MFG'S. INSTRUCTIONS, COLOR SHALL BE SELECTED FROM STANDARD COLOR PALLETE BY OWNER
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12. 1X PRIMED DOOR & WINDOW TRIM. INSTALL & FLASH PER MFG'S. INSTRUCTIONS.
13. CONT. RIDGE VENT @ ROOF RIDGES.
14. PROVIDE CONT. VINYL FLASHING @ DEMISING WALL & ROOF CONNECTION, INSTALL PER MFG. INSTRUCTIONS.
15. EXTERIOR INSUL. DOOR, INSTALL PER MFG'S. INSTRUCTIONS, SEE PLANS FOR SIZING INFORMATION.
16. ANDERSEN 400 SERIES WDW. INSTALL PER MFG'S. INSTRUCTIONS, SEE PLANS FOR SIZING INFORMATION.
17. 25 YEAR ASPHALT SHINGLE ROOF SYSTEM OVER ONE LAYER OF 30# ASPHALT FELT & ICE DAM PER MFG. RECOMMENDATIONS @ ALL EAVES, VALLEYS, & RIDGES. STYLE & COLOR SHALL BE SELECTED FROM STANDARD COLOR PALLETE BY OWNER.
18. CONT. PRE-FINISHED MTL. GUTTER & DOWNSPOUTS (DOWNSPOUTS @ EVERY 25' MIN.)
19. ROWLOCK BRICK SILL.
20. 12" FIBER CEMENT WRAPPED TRIM BOARD. INSTALL & FLASH PER MFG'S. INSTRUCTIONS.

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REVISIONS

NEW TOWNHOME BUILDING FOR:
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE201

20

1 **BUILDING EAST ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
2. POURED CONC. FOUNDATION WALL AND CONC. FOOTING. SEE STRUCTURAL DWG'S.
3. PRIMED TRIM BD. @ SOFFIT. INSTALL & FLASH PER MFG'S. INSTRUCTIONS.
4. REINF. CONC. PORCH, FOUNDATION WALL & STEPS PER CURRENT APPLICABLE CODE TO GRADE.
5. FIBER CEMENT WRAPPED 2X PT. WD. FRAMED COLUMN BASE.
6. FIBER CEMENT WRAPPED PT. WD. PORCH COLUMN.
7. 4" NOMINAL BRICK.
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14. PROVIDE CONT. VINYL FLASHING @ DEMISING WALL & ROOF CONNECTION, INSTALL PER MFG. INSTRUCTIONS.
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REVISIONS

NEW TOWNHOME BUILDING FOR:

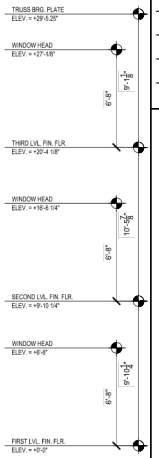
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE202

21



1 **BUILDING SOUTH ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
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REVISIONS

NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE203

22

1 **BUILDING WEST ELEVATION**
3/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
2. POURED CONC. FOUNDATION WALL AND CONC. FOOTING. SEE STRUCTURAL DWG'S.
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REVISIONS

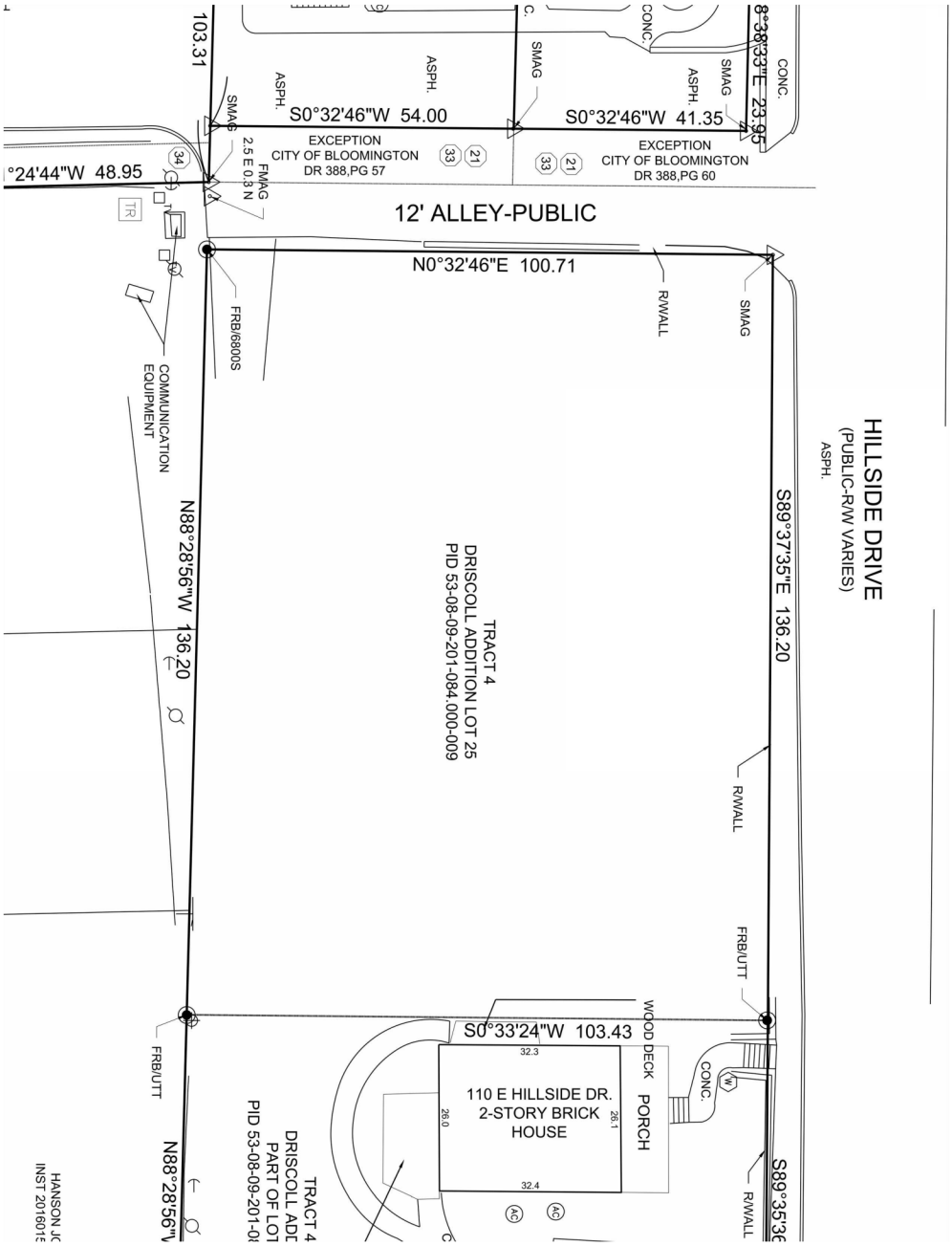
NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE204



A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN	REVISIONS
01		110 TOWNS	MM/DD/YY · REMARKS

TOTAL LOT AREA = 13,901 SF

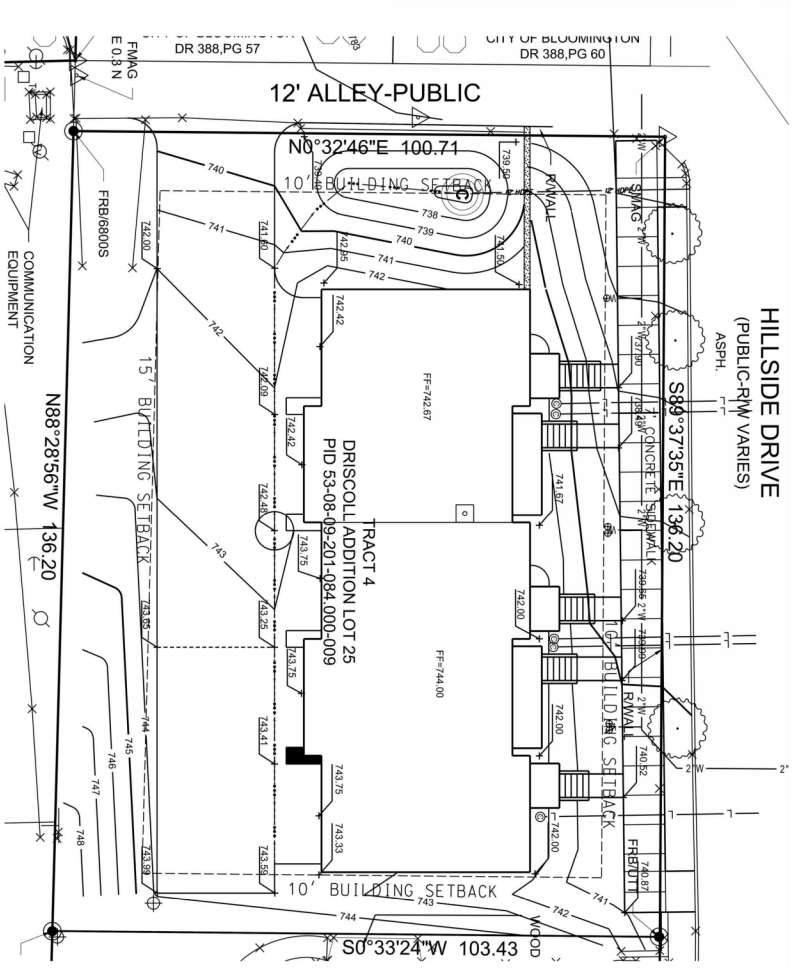
PUBLIC WALK =	939 SF	6.8%
PERVIOUS =	5,705 SF	41.0%
IMPERVIOUS =	7,257 SF	52.2%

N

1"=10'

A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN	REVISIONS
02		110 TOWNS	MM/DD/YY · REMARKS

DEVELOPMENT PLAN



A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN	REVISIONS
04		110 TOWNS	MM/DD/YY · REMARKS

To the BZA:

Thank you for the opportunity to address concerns regarding the proposal to build Student/Dormitory Housing at 106 E Hillside Drive.

Please deny this request. A change to conditional use will not result in a community good, such as a school, daycare, or place of worship.

Denial of the conditional use will allow the site to be developed according to current RM zoning. This would be an enormous opportunity to achieve many of the goals of the Comprehensive plan. Adding "missing middle" forms that blend with the established neighborhood and providing needed options of housing options for a large range of people would benefit the neighborhood and the city. Small housing forms with less intense use would benefit and attract young professionals, small families, workforce residents or empty nesters.

Sincerely,

Jan Sorby
Bloomington Restorations Inc., Chair of Endangered Historic Properties, Hillside property owner, Former President of the Bryan Park Neighborhood Association

20.06.040(d)(6) Approval Criteria: i. Consistency with Comprehensive Plan and Other Applicable Plans
The proposed use and development shall be consistent with and shall not interfere with the achievement of the goals and objectives of the Comprehensive Plan and any other applicableadopted plans and policies.

Objection
The proposed development does not agree with the *Comprehensive Plan* or acknowledge the unsafe conditions reported in the *2019 Bloomington Transportation Plan.*

The *Comprehensive Plan* that recognizes that most new housing development the past decade has been student housing. Now, a primary goal is to change this trend and offer a wider variety of housing options built for a broader range of people. The location of the proposed development does not meet the criteria listed in the *Comprehensive Plan* for appropriate locales for Student/Dormitory Housing. Appropriate locations are close to campus that already have a high percentage of student-oriented housing, within easy walking distance to campus, have easy access to university-provided parking, and IU transit system. The *Comprehensive Plan* redirects Student/Dormitory housing away from the areas near downtown. The proposed site is currently serviced by city buses; however, it will soon be limited when Bloomington Transit changes the routes.

Promoting more housing opportunities in urban neighborhoods close to employment, shopping, and other amenities for young professionals, workforce residents, families, residents at different stages of life and household incomes, is a primary goal of the *Comprehensive Plan*. The proposed development meets none of the provisions above. Apartments with 3-bedrooms will limit who can afford an expensive large apartment. Many people will be priced out of the proposed development.

The proposed development does not promote housing solutions that mitigate against rapid price changes in the neighborhood. To the contrary, Student/Dormitory housing will bring more short-term residents to the neighborhood. At almost 70% rental the neighborhood is at risk of destabilization. Rental for young families, workforce housing and young professionals or owner-occupied multifamily could help stabilize the neighborhood. Housing that only students will be able to afford does just the opposite.

Below are quotations from the *Comprehensive Plan* that support the objection to this development.

- *(Pg 64) Comprehensive Plan Objectives: Policy 5.3.4: Redirect new student-oriented housing developments away from the Downtown and nearby areas, and toward more appropriate location closely proximate to the IU campus that already contain a*

relatively high percentage of student-oriented housing units, are within easy walking distance to the campus, and have direct access to university-provided parking as well as the university transit system

- *(pg. 61) Housing and Neighborhood: Goals & Policies: 14: Offer a wide variety of quality housing options for all incomes, ages, and abilities.*
- *(pg. 61) Housing and Neighborhood: Policy 5.1.3: Encourage a wide range of housing types to provide a more diverse mix of housing opportunities and household income levels, preferably within neighborhoods and multi-family housing developments.*
- *(pg. 63) Housing and Neighborhood Goals & Policies: New multifamily housing projects catering largely to students must be better planned and distributed adjacent to campus or in underdeveloped commercial corridors along transit routes outside Downtown, but still relatively close to the university*
- *(pg. 63) Housing and Neighborhood Goals & Policies: 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- (pg. 60) *Housing and Neighborhood: Now that 1,900 new housing units have been constructed Downtown within the past decade (almost all of them apartments), the market dynamic is shifting. More market opportunities may exist to convert single-family homes from student-rental to owner occupied. This can allow more people to have a chance to live in urban neighborhoods, which are often closer to employment, shopping, and other amenities.*
- *(pg. 64) Housing and Neighborhood: Goal 5.4: Neighborhood Stabilization: Promote a variety of homeownership and rental housing options, mitigate against unforeseen eviction and rapid price changes, and promote opportunities for community interaction that are also aimed towards different stages of life, ages, and household incomes.*
- *(pg. 61) Housing and Neighborhood: Bloomington's older urban, small scale, compact, single family housing stock located primarily around the city center and university provide some of the city's more affordable housing stock and must be protected. Building a growing stock of affordable housing requires assuring sustainability so unaffordable stock is not the only option for future generations. Mixed income neighborhoods are fundamental to successful, sustained, affordable housing stock. New multifamily housing projects catering largely to students must be better planned and distributed adjacent to campus or in underdeveloped commercial corridors along transit routes outside Downtown, but still relatively close to the university*
- *(Pg. 65) Housing and Neighborhood: Seek to expand compact urban housing solutions such as pocket neighborhoods, tiny houses, accessory dwelling units, and similar housing solutions, in a manner that attracts workforce and senior populations or otherwise complements the surrounding neighborhood*

20.06.040(d)(6) Approval Criteria: ii. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequatelevels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

Objection

The proposed development will adversely impact the overall health and well-being of people who live in the development as well as the surrounding neighborhood. Student/Dormitory housing use at this site is not appropriate, ill-advised and will endanger public safety.

The Hillside area presents enormous infrastructure challenges. Because of the traffic, this is a dangerous location. It is especially dangerous for the intensity of use that Student/Dormitory housing triggers. If built, it will require crossing Hillside to reach on-street parking for residents and visitors. Dangerous midblock crossings will be the norm. Pedestrians crossing Hillside from the north at the signaled intersection are impeded by a utility pole installed in the middle of the narrow sidewalk before reaching the pedestrian crosswalk. The 7' tall wall obstructs sightlines in both directions at the signal. And the enormous turning radius encourages fast traffic. Hillside is narrow, lacking a tree plot, turning lane or bike lane. The Washington/Hillside intersection has extremely limited sightlines that force vehicles into the intersection and past the pedestrian crosswalk.

Mixed urban residential neighborhoods are described in the Comprehensive Plan as missing basic and essential utilities. This neighborhood is exactly such a neighborhood and has been skipped over for improvement for decades.

There are no sidewalks, storm sewers, curbs, gutters, or tree plots on Southern, Wilson, Grant, and Palmer streets. These streets are very narrow with high crowns and deep ruts on both sides, and the pavement is crumbling at the edges. Worn out water mains erupt on a regular basis in the neighborhood. The sidewalks on Hillside, Washington, and Lincoln are sub-standardly narrow with sections rated as the poorest condition in Bloomington on the *Sidewalk Inventory Report*.

The *2019 Bloomington Transportation Plan* identifies the Hillside, Walnut, Washington area as a hotspot for pedestrian/motor vehicle accidents and as one of the least connected areas on the *Bicycle Network Analysis* map. Hillside is Bloomington's main southern east/west corridor and carries a greater volume of daily traffic than is recommended for a general urban street. The traffic is extraordinarily fast and a digital traffic warning sign displaying speeds of motorist is now a permanent fixture on Hillside at Grant. As a general urban street, Hillside lacks the basic requirements such as on-street parking, 25mph speed, turning lanes, tree plots between sidewalk and street, or buffered/protected bike lanes.

The south side of Hillside is basically 2 "superblocks", each 3 blocks long with the only cross street at Grant. Grant dead ends at Southern. Washington, Lincoln, Dunn, and Palmer dead end into Hillside. Southern is blocked from Walnut just west of Grant. The superblocks lack alleys or direct access to on-street parking. The alley west of the proposed development dead ends mid-block before reaching Southern and the exit onto Hillside is very close to the intersection. The prevailing development pattern in this area is exceptionally dense at about 0.12 acres (5,227 sq. ft.) per lot and most of the houses are modest in size. The area includes owner-occupied and rental, single-family and duplex/fourplex-multifamily. The neighborhood was built before modest families owned cars and therefore the few existing driveways were retrofitted. Washington, Lincoln, and the new Dunn PUD are the only streets offering alley parking opportunities. Hillside has limited driveways and no on-street parking. Washington and Lincoln provide the only on-street parking for all the residents and visitors in the area and are routinely congested. Washington has seen an increased use since the apartment building at Driscoll and Walnut was granted a parking variance for required on-site parking.

Creating a pedestrian friendly edge to the neighborhood along Hillside will be challenging but neighbors requested, and still hope for, a subarea plan to help find solution for this problematic area. Hillside could be a true asset for the neighborhood and the city. The South Dunn PUD demonstrates how wonderfully a street can be remade.

Below are quotations from the 2019 Bloomington Transportation Plan and the Comprehensive Plan that support the objection

2019 Bloomington Transportation Plan

- *(pg. 11) Traffic Volumes: S Walnut St from E Wilson St to S Monon Dr, 2008, the average daily traffic volume was vehicles/day =27,052. General Urban Street. Auto traffic volume (ADT) should be 10,000-20,000.*
- *(pg. 14 Map) Hillside is categorized as forth busiest streets and a hotspot for motor vehicles-pedestrian crash density*
- *(pg. 18 map) Listed as one of the least connected areas on the Bicycle Network Analysis*
- *(pg. 36) General urban street specifications are: 2 auto travel lanes 10' wide, on-street parking, recommends target speed 25mph, preferred Bike facility (2 buffered or protected bike lanes)*

Comprehensive Plan

- *(pg. 63) Housing & Neighborhoods: Goals & Policies: Policy 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- *(pg. 16) UDO Objectives: Objective: 11: Ensure all land development activity makes a positive and lasting community contribution*

- *(Pg. 63) Housing & Neighborhoods: Goals & Policies: Policy 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- *(pg. 63) Housing & Neighborhoods: Objective 13: Embrace all of our neighborhoods as active and vital community assets that need essential services, infrastructure assistance, historic protection, and access to small-scaled mixed-use centers*
- *(pg. 64) Housing & Neighborhoods: Neighborhood Stabilization: Goal 5.4: Enhance the appearance, safety, and walkability of sidewalks, multi-use paths and trails, and streets in all neighborhoods through proactive repair and cleaning programs to reinforce an open network connecting each neighborhood to adjacent land uses and to the city as a whole*
- *(Pg. 84) Mixed Urban Residential: Land Use: Mixed Urban Residential: Additionally, many of these areas were built without essential urban amenities such as storm sewers, curbs, and sidewalks.*

20.06.040(d)(6) Approval Criteria: iii. Minimizes or Mitigates Adverse Impacts

1. *The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.*
2. *The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors,vibrations, or objectionable lights.*

Objection

The proposed development would be disruptive to the established relationship between the built environment and street. The proposed development is profoundly inconsistent with the historic development pattern in the area and will affect how the street feels and is used. The jarring shift in scale, bulk and orientation of the proposed building will make reclaiming Hillside as a walkable urban asset out of reach. In addition, the shadows cast on neighboring houses will stop the possibility for owners (on the east and west) of the proposed development, to utilize solar energy in the future.

The proposed development will deprive adjacent properties of natural light.

The *Comprehensive Plan* states that existing residential neighborhoods, or any portions of a neighborhood having a consistent built character, should be maintained at their prevailing pattern of development, building distribution, and scale. Guidance for appropriate site design in mixed urban residential areas stipulates that redevelopment and rehabilitation must respect the prevailing character and development pattern of adjacent properties in the older neighborhoods. In-fill development must continue to emphasize pre-WWII neighborhood characteristics regarding building mass, scale, and other site planning features. Guidance for land use development approvals require that vacant lots be redeveloped with compatible infill that reflects the prevailing character of the neighborhood.

The orientation, scale and building distribution of the proposed Student/Dormitory housing is not compatible with the prevailing historic development pattern. The historic development pattern surrounding the proposed development is a consistent human-scale, pre-auto, 1920s pattern. The distribution of these narrow buildings is close together with small side yards between each house. The scale is small, approximately 24’ to 28’ wide with one or two stories. The orientation of the existing buildings is with the narrow wall facing the street and the long wall to the side. The neighborhood commercial buildings follow the same historic development pattern in scale, distribution, and bulk. Altogether, this historic pattern creates a human-scale and walkable environment.

The develop pattern for the proposed project is suburban. It is characterized by wide buildings that are orientated with the broad side of the building facing the street. The design of the proposed development was used to build the University Manor complex in a suburban context on the north side of Bloomington. The proposed structure is very wide, about 100’, making it approximately four times as wide as the compact urban neighborhood context. The expanse of the proposed building is contrary to the compact urban human-scale surrounding the site.

Additionally, the site for this proposal is in the Monon Historic Study district. It has been an important study area since at least 2004 when it was listed in the *City of Bloomington Interim Report*. All eight adjacent houses are listed with the state of Indiana in their *Indiana Historic Sites and Structures Inventory* as either Notable or contributing. Breaking the historic building pattern will adversely impact these properties. This is not a locally designated district, and no design regulations are required beyond what is specified in the *Comprehensive Plan* for all Mixed Urban Residential neighborhoods.

Significant adverse impact will be created by the height of the proposed building which is located at the crest of a hill and will block access to natural light on the east and west of the site. Two different façade drawings are shown in the developer's packet; one drawing shows a 3-story building and the other shows a 3.5-story building. Both drawings lack measurements for the total height of the proposed project. Regardless, the elevation of the hill exacerbates the reach the shadows cast on houses to the east and west. Owners to either side of this proposed development will be impeded by the shadows to use solar energy in the future.

Below are quotations from the Comprehensive Plan that support the objection

- *(Pg. 84) Mixed Urban Residential: Land Use Development Approvals: Vacant lots should be redeveloped with compatible infill that reflects the prevailing character of the neighborhood.*
- *(pg. 84) Mixed Urban Residential: Land Use Development Approvals: Allow context sensitive multifamily redevelopment along higher volume roads, along district edges, and near major destinations when appropriately integrated with adjacent uses and styles.*
- *(pg. 63) Housing & Neighborhoods: Policy 5.2.6: Existing residential neighborhoods, or any portions of a neighborhood having a consistent built character, should be maintained at their prevailing pattern of development, building distribution, and scale. This built character may be complemented by both traditional and contemporary architecture.*
- *(pg. 63) Housing & Neighborhoods: Policy 5.2.4: Design and arrange new multifamily buildings, including entries and outdoor spaces, so that dwellings have a clear relationship with the public street and operate on a pedestrian scale.*
- *(Pg. 84) Mixed Urban Residential: Site Design: The majority of centrally located neighborhoods have been built out, so major changes will occur with redevelopment and rehabilitation of existing structures must respect the prevailing character and development pattern of adjacent properties. Although there may be various architectural styles that would be appropriately compatible with the existing architecture in these older neighborhoods, the district must continue to emphasize pre-WWII neighborhood characteristics regarding building mass, scale, landscaping, and other site planning features.*
- *(Pg. 84) Mixed Urban Residential: Land Use Development Approvals: Allow context sensitive multifamily redevelopment along higher volume roads, along district edges, and near major destinations when appropriately integrated with adjacent uses and styles.*
- *(pg. 63) Housing & Neighborhoods: Goals & Policies Principals: 11: Ensure all land development activity makes a positive and lasting community contribution*
- *(Pg. 85) Mixed Urban Residential: Form Based Code: To better respond to the relationship of buildings to the street, architectural massing, shape and design, and the location of on-site parking. A form-based code focuses on the physical shape and configuration of the build environment rather than land uses. Using this approach can offer more predictability than flexible Planned Units Developments processes offer. This strategy should not be used exclusively but rather in balance with use-based zoning. Land use decisions should be based both on compatible uses as well as on form.*
- *(Pg 96) Focus Areas & Strategies: Focus Areas are locations expected to see significant change in land use activities over the next decade; however, they should follow their respective development themes (Maintain, Enhance, and Transform)*

iii. Minimizes or Mitigates Adverse Impacts

1. *The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.*

Although these was no requirement to meet with neighbors there was not a good-faith effort to address the concerns of the adjoining property owners when concerns were lodged through the Planning and Transportation Department.

The Unified Development Ordinance specifies that at least one sign should be posted on the property informing Bloomington residents of a proposed change in use. No notice was posted on the property.

The notice listed in the newspaper included an incorrect address for development on the parcel at 107 E Hillside. The notice to adjacent property owners also contained the wrong address.

BLOOMINGTON BOARD OF ZONING APPEALS **CASE#: CU-24-21**
STAFF REPORT **DATE: February 17, 2022**
LOCATION: 106 E Hillside Drive

PETITIONER: WS Property Group
1507 S Piazza Drive, Bloomington, IN 47401

CONSULTANT: Smith Design Group
2755 E Canada Drive, Bloomington, IN 47401

REQUEST: The petitioner is requesting Conditional Use approval to allow the use "Student Housing or Dormitory" in the Residential Multifamily (RM) zoning district to allow for one new building containing five, three-bedroom apartments.

REPORT: The property is located at 110 E. Hillside Drive and is currently zoned Residential Multifamily (RM). The properties to the south, east, and west are also zoned RM. The properties to the north are zoned Residential Urban (R4). The property is currently a vacant lot. The site is not within a historic district or any overlay districts.

The petitioner is proposing to construct a new three-story structure with ground floor parking spaces and five three-bedroom dwelling units. Since the proposed units will each contain 3 bedrooms, they are classified as student housing or dormitory use. Student housing is listed as a conditional use in the RM zoning district and the petitioner is therefore requesting conditional use approval to allow for this new construction. The petitioner previously received a variance under V-16-20 to allow for the front steps of the structure to encroach into the setback. The petitioner is also requesting a variance from the required front parking setback of 20' to allow for ground floor parking, which will be heard by the Board of Zoning Appeals on December 23, 2021.

CRITERIA AND FINDINGS FOR CONDITIONAL USE PERMIT

20.06.040(d)(6) Approval Criteria
(B) General Compliance Criteria: All petitions shall be subject to review and pursuant to the following criteria and shall only be approved if they comply with these criteria.

i. Compliance with this UDO
ii. Compliance with Other Applicable Regulations
iii. Compliance with Utility, Service, and Improvement Standards
iv. Compliance with Prior Approvals

PROPOSED FINDING: There are use-specific standards that apply to student housing within the RM district. The UDO restricts the maximum floor plate for student housing uses in the RM district to 5,000 square feet per lot. The proposed building will be approximately 3,519 square feet and therefore meets the 5,000 square foot maximum floor plate allowance. This petition received a variance from front setback standards under V-16-20 and is currently requesting a variance from the required front parking setback which is pending. This petition complies with other applicable regulations, utility, service, and improvement standards as required by the general compliance criteria.

The UDO requires that student housing or dormitory uses outside of the Mixed-Use Student Housing (MS) zoning district be separated from other student housing or dormitory uses by at least 300 feet. Planning staff did not find any existing student housing or dormitory uses within 300 feet of this property.

(C) Additional Criteria Applicable to Conditional Uses

i. Consistency with Comprehensive Plan and Other Applicable Plans

The proposed use and development shall be consistent with and shall not interfere with the achievement of the goals and objectives of the Comprehensive Plan and any other applicable adopted plans and policies.

PROPOSED FINDING: This proposal is in line with the goals of the Comprehensive Plan. The Comprehensive Plan identifies this area as "Mixed Urban Residential." Infill development within this district is encouraged as part of creating a compact urban form. This petition provides additional housing units on a property that is currently vacant. The construction of five dwelling units on this site is not expected to have any negative impacts.

ii. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

PROPOSED FINDING: This site is well served by utility service and no problems with providing utility service to this site are expected. This site is near the 7 and 1 bus lines and intends to provide adequate parking for the residents.

iii. Minimizes or Mitigates Adverse Impacts

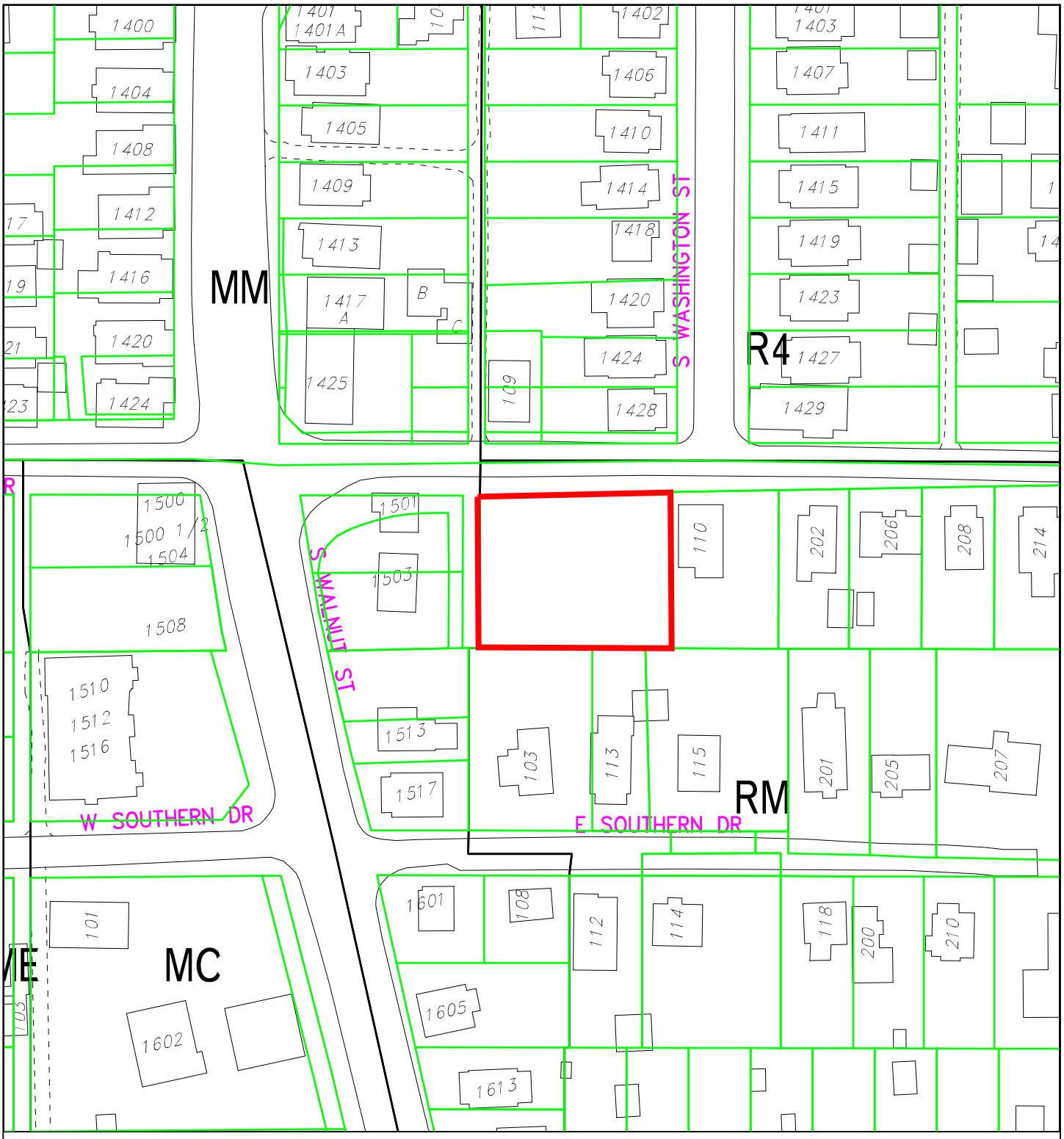
1. *The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.*
2. *The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors, vibrations, or objectionable lights.*
3. *The hours of operation, outside lighting, and trash and waste collection must not pose a hazard, hardship, or nuisance to the neighborhood.*
4. *The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.*

PROPOSED FINDING: There are no natural, scenic, or historic features that will be impacted. The creation of five dwelling units for student housing on this property is not expected to have any adverse impacts on surrounding properties. No additional lighting outside of what is typical

of a residential unit is being proposed. No nuisance regarding noise, smoke, odors, vibrations, lighting, or hours of operation is found. No pre-submittal neighborhood meeting is required.

RECOMMENDATION: The Department recommends that the Hearing Officer adopts the proposed findings and recommends approval of CU-24-21 with the following conditions:

1. This conditional use is limited to a maximum of five units and a maximum of three bedrooms per unit as submitted, no other use is approved.
2. A grading permit is required before construction can begin.



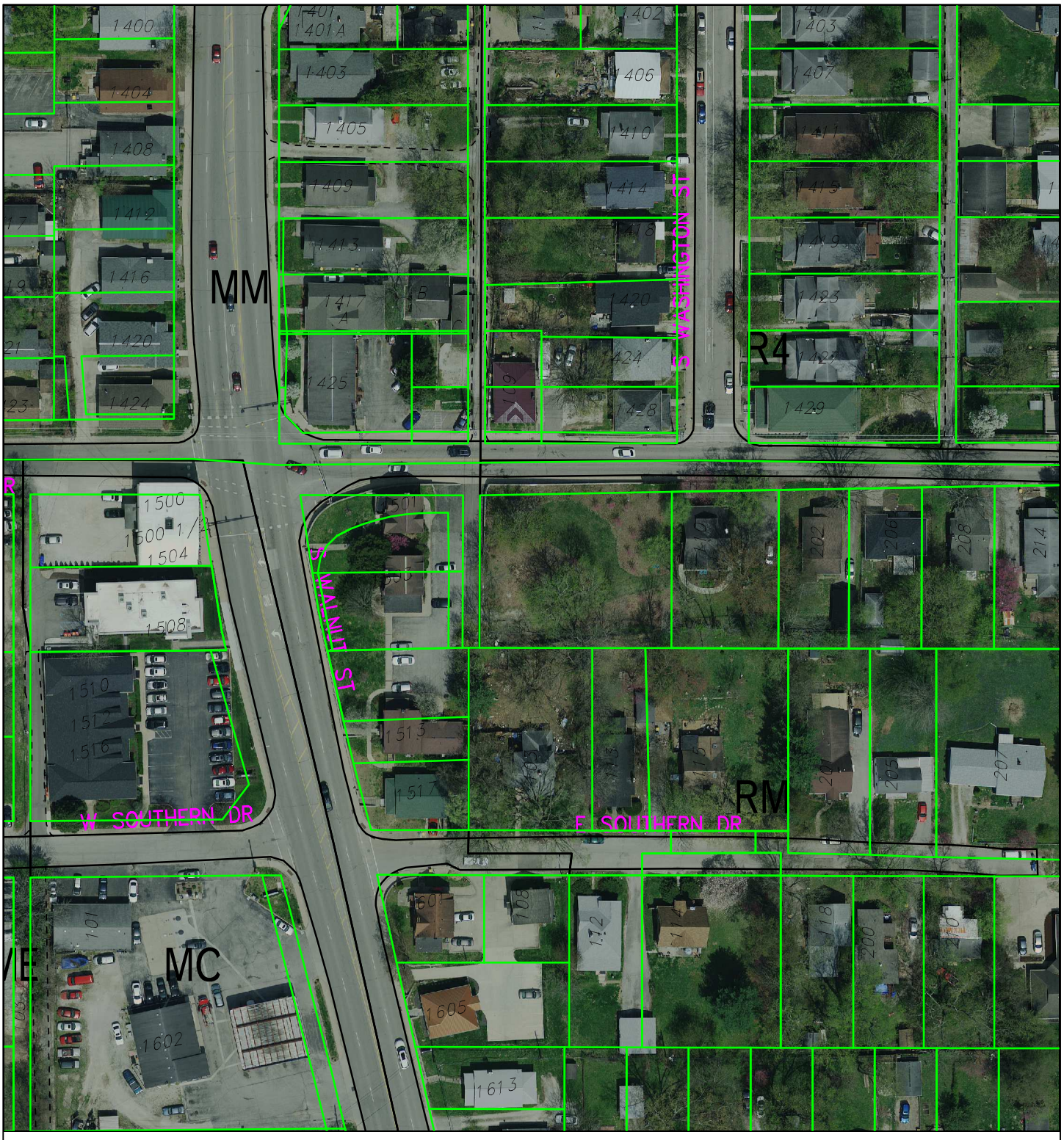
City of Bloomington
Planning

By: keegan.gulick
17 Nov 21

100 0 100 200 300

Scale: 1" = 100'

For reference only; map information NOT warranted.



City of Bloomington
Planning

By: keegan.gulick
17 Nov 21

100 0 100 200 300

Scale: 1" = 100'

For reference only; map information NOT warranted.

WS Property Group
1507 South Piazza Drive
Bloomington, IN 47401
office: 812.332.9575
fax: 812.332.0261
www.WSPropertyGroup.com

November 17, 2021

Keegan Gulick
City of Bloomington Planning and Transportation Dept.
401 N. Morton Street
Bloomington, IN. 47402

RE: 110 Hillside Drive – Student Housing

Dear Keegan,

WS Property Group is proposing to redevelop a vacant lot at 110 E Hillside Drive and are requesting a variance from 20.04.0?0(?) to allow 5 three-bedroom townhomes to be constructed.

The project anticipates the construction of a single building comprised of 5 townhomes. Each townhome is comprised of 3 levels; parking, main-living, and bedroom. We believe the scale and scope of the project fits with the surrounding uses and will not be injurious to the public, nor adversely affect the use and value of the adjacent properties.

Please find attached the required information to render your approval.

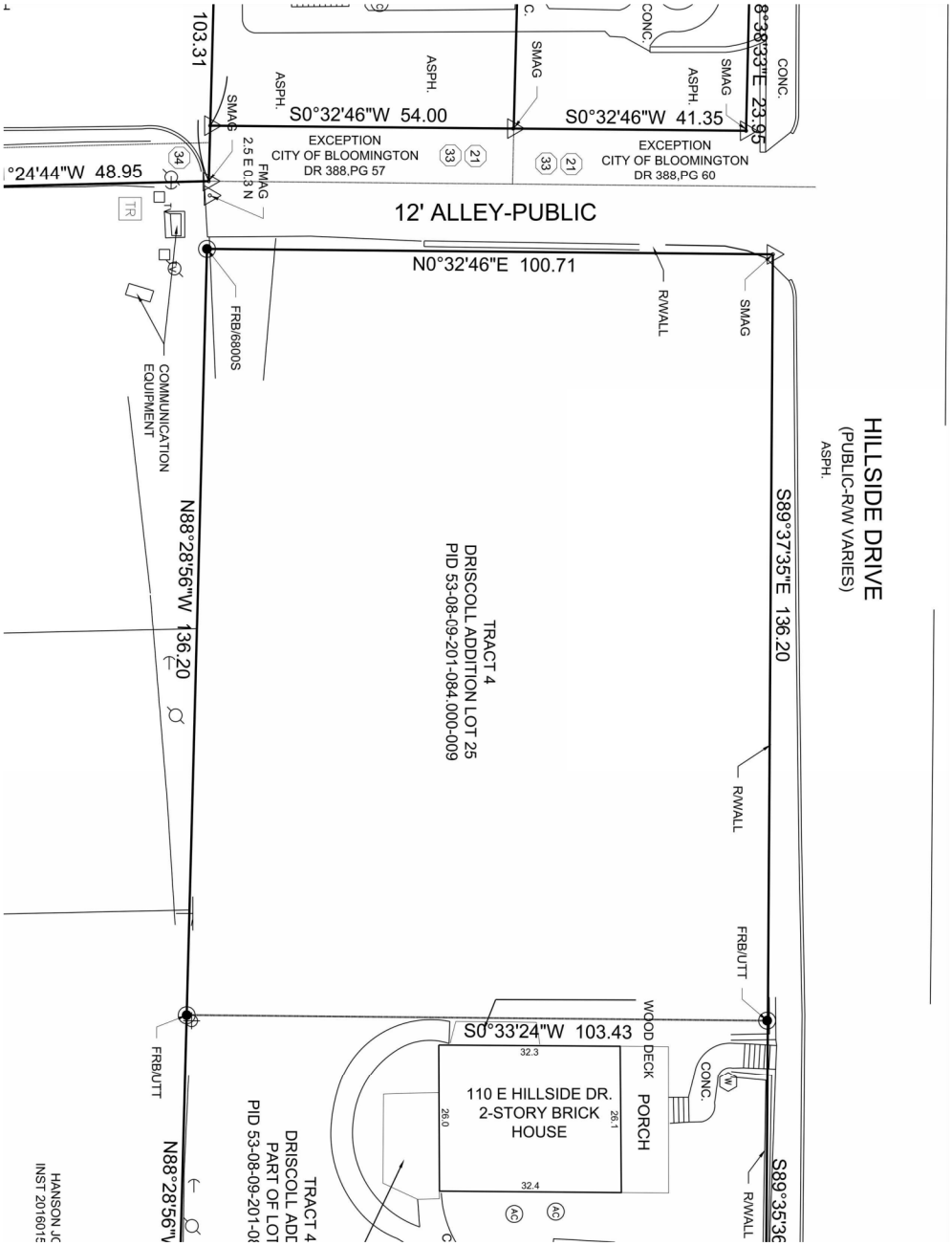
Respectfully,
*WS*Property Group

Timothy A. Hanson
V.P. Development

110 TOWNS
110 E HILLSIDE DRIVE
BLOOMINGTON INDIANA 47401

WS PROPERTY GROUP
1507 S PIAZZA DRIVE
BLOOMINGTON, IN 47401

June 18, 2021



A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN	REVISIONS
01		110 TOWNS	

TOTAL LOT AREA = 13,901 SF

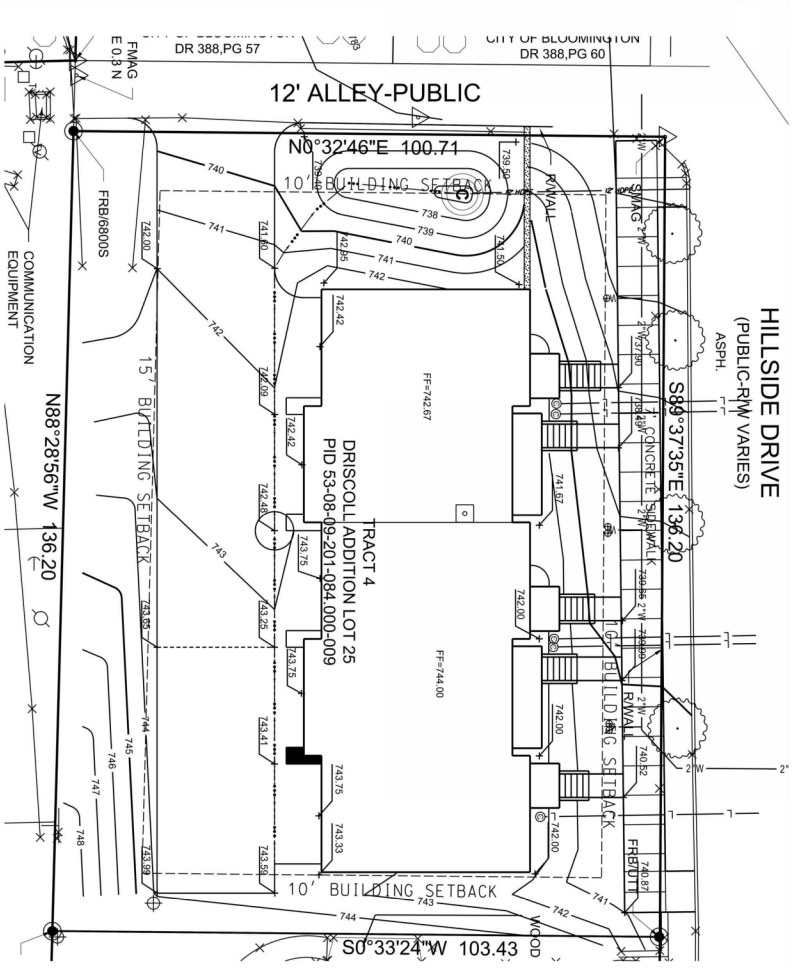
PUBLIC WALK =	939 SF	6.8%
PERVIOUS =	5,705 SF	41.0%
IMPERVIOUS =	7,257 SF	52.2%

N

1"=10'

A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN	REVISIONS
02		110 TOWNS	MM/DD/YY / REMARKS

DEVELOPMENT PLAN



1"=10'

N

A	110 TOWNS 110 E HILLSIDE DRIVE BLOOMINGTON INDIANA 47401	WS PROPERTY GROUP 1507 S PIAZZA DRIVE BLOOMINGTON. IN
04		110 TOWNS

REVISIONS

	MM/DD/YY	REMARKS
1		
2		
3		
4		
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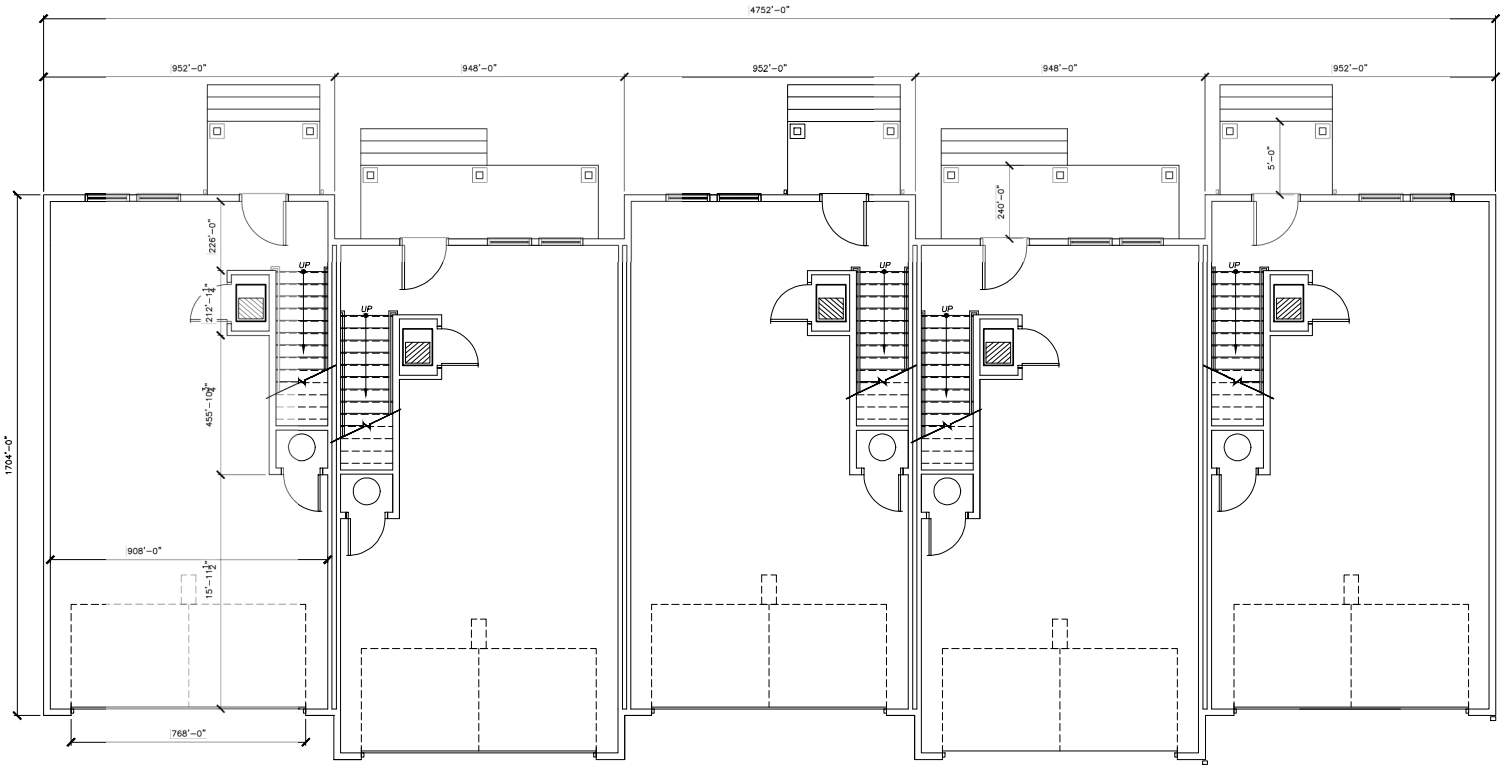
42



1 **FLOOR PLAN - FIRST FLOOR**
1/4" = 1'-0"

GENERAL FLOOR PLAN NOTES:

- DO NOT SCALE DRAWINGS, DIMENSIONS SHALL PREVAIL. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS RELATED TO THE WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. IF CONTRACTOR FAILS TO VERIFY DIMENSIONS AS INDICATED, ANY & ALL CORRECTIVE ACTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
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- ALL DOOR OPENINGS SHALL BE LOC. 4" FROM ADJOINING WALL U.N.O.
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- CAULK ALL JOINTS BETWEEN DIFFERENT MATERIALS IE: GYP. BD. & MASONRY.
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- SIZE OF STAIR RISERS MAY VARY ACCORDING TO SIZE OF FLR. SYSTEM.

FLOOR PLAN NOTES:

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FLOOR PLAN KEYNOTES:

1 UNIT SEPARATION WALL TO BE (2) – 1 HOUR RATED FIRE WALL CONSTRUCTION CONTINUOUS FROM LOWER LEVEL TO ROOF DECK.

TABOR BRUCE
ARCHITECTURE & DESIGN INC.
1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
TELEPHONE: (812) 333-4258 WEB: WWW.TABORBRUCE.COM

REVISIONS

NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
FIRST LEVEL
FLOOR PLAN
3-UNIT

SHEET NO.
AE101

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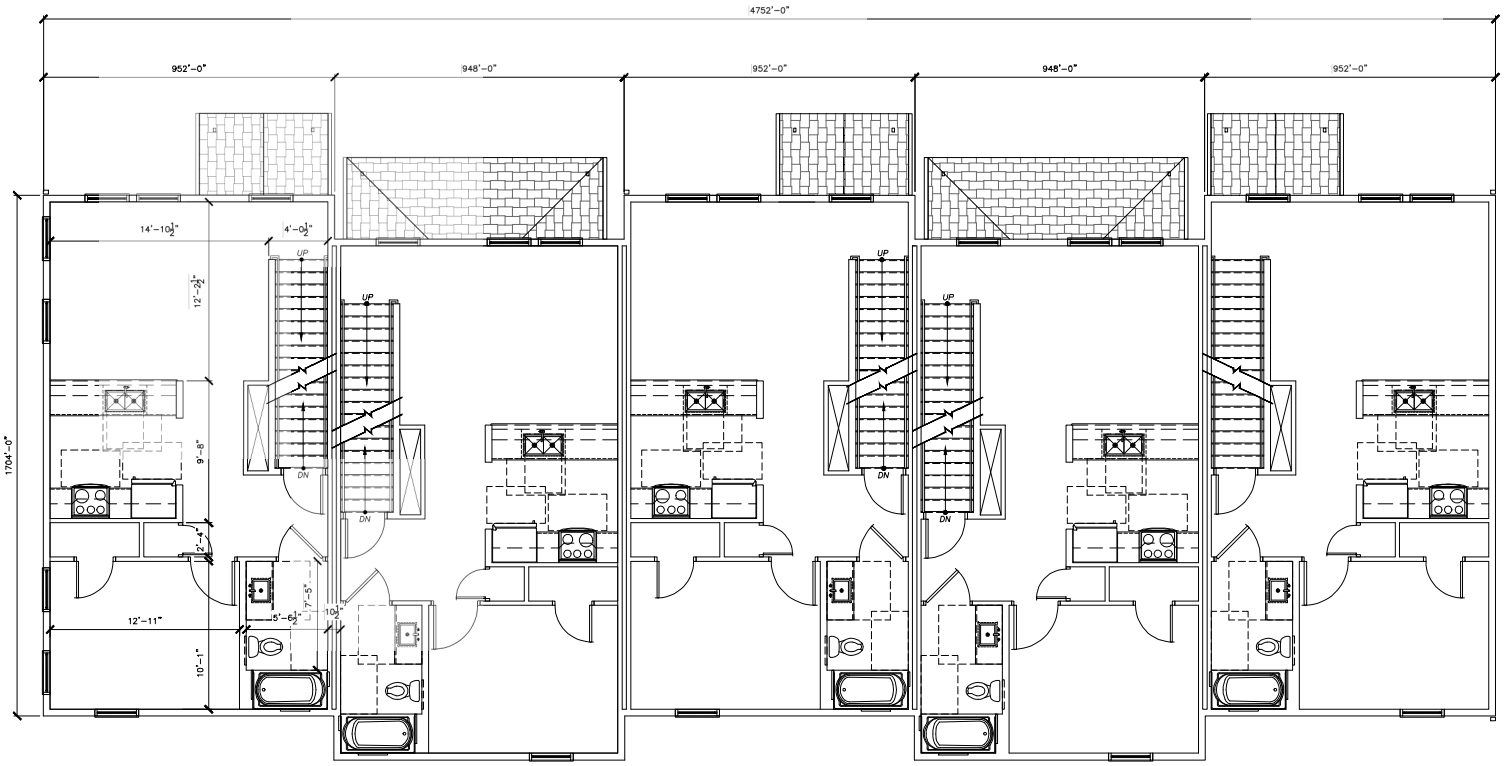
43



1 FLOOR PLAN - SECOND FLOOR
1/4" = 1'-0"

N

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2. INSTALL GUARDRAIL ALONG ALL PORCHES/DECKS IF GREATER THAN 30" TO FINISHED GRADE

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REVISIONS

NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE

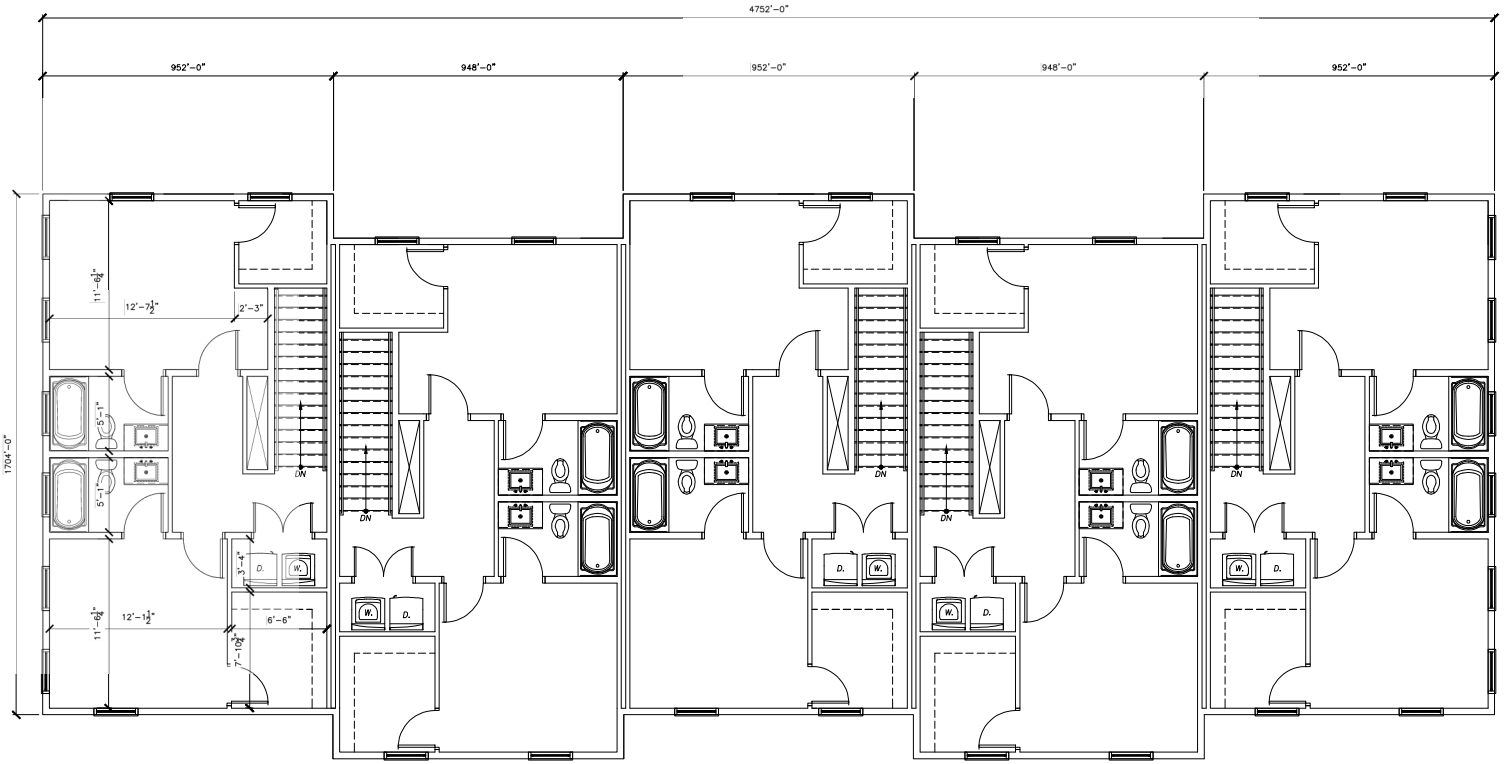
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	2021
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
SECOND LEVEL FLOOR PLAN 3-UNIT

SHEET NO.
AE102

44



1 FLOOR PLAN - THIRD FLOOR
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N

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REVISIONS

NEW TOWNHOME BUILDING FOR:

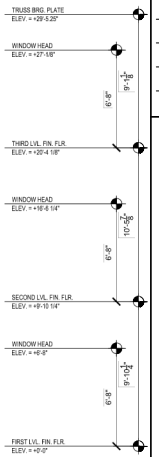
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
THIRD LEVEL
FLOOR PLAN
3-UNIT

SHEET NO.
AE103

45



1 **BUILDING NORTH ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
2. POURED CONC. FOUNDATION WALL AND CONC. FOOTING. SEE STRUCTURAL DWG'S.
3. PRIMED TRIM BD. @ SOFFIT. INSTALL & FLASH PER MFG'S. INSTRUCTIONS.
4. REINF. CONC. PORCH, FOUNDATION WALL & STEPS PER CURRENT APPLICABLE CODE TO GRADE.
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6. FIBER CEMENT WRAPPED PT. WD. PORCH COLUMN.
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REVISIONS

NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE201

J:\CURRENT\2021\Commercial\5821 - Hillside Townhomes\Design\Construction\AE201 Bldg Elevations - 5 Unit.dwg, 10/11/2021 2:40:16 PM

46

1 **BUILDING EAST ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
2. POURED CONC. FOUNDATION WALL AND CONC. FOOTING. SEE STRUCTURAL DWG'S.
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REVISIONS

NEW TOWNHOME BUILDING FOR:

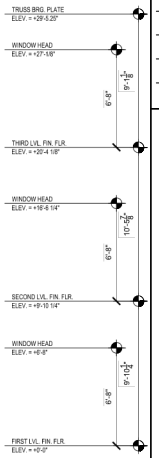
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE202

47



1 **BUILDING SOUTH ELEVATION**
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
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REVISIONS

NEW TOWNHOME BUILDING FOR:
HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE203

48

1 BUILDING WEST ELEVATION
3/16" = 1'-0"

ELEVATION KEYNOTES:

1. FINISHED GRADE, ELEV. VARIES SEE SITE PLAN. SLOPE MIN. 1/4" PER FT. AWAY FROM BLDG. @ ALL LOC.
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REVISIONS

NEW TOWNHOME BUILDING FOR:

HILLSIDE DRIVE
110 E HILLSIDE DR.
BLOOMINGTON, INDIANA 47401

PROJECT NO.	5821
DATE	OCTOBER 11, 2021
DRAWN BY	S.MATTHEWS
CHECKED BY	D. BRUCE

SHEET NAME
NORTH ELEVATION 5-UNIT

SHEET NO.
AE204

To the BZA:

Thank you for the opportunity to address concerns regarding the proposal to build Student/Dormitory Housing at 106 E Hillside Drive.

Please deny this request. A change to conditional use will not result in a community good, such as a school, daycare, or place of worship.

Denial of the conditional use will allow the site to be developed according to current RM zoning. This would be an enormous opportunity to achieve many of the goals of the Comprehensive plan. Adding "missing middle" forms that blend with the established neighborhood and providing needed options of housing options for a large range of people would benefit the neighborhood and the city. Small housing forms with less intense use would benefit and attract young professionals, small families, workforce residents or empty nesters.

Sincerely,

Jan Sorby
Bloomington Restorations Inc., Chair of Endangered Historic Properties, Hillside property owner, Former President of the Bryan Park Neighborhood Association

20.06.040(d)(6) Approval Criteria: i. Consistency with Comprehensive Plan and Other Applicable Plans
The proposed use and development shall be consistent with and shall not interfere with the achievement of the goals and objectives of the Comprehensive Plan and any other applicableadopted plans and policies.

Objection
The proposed development does not agree with the *Comprehensive Plan* or acknowledge the unsafe conditions reported in the *2019 Bloomington Transportation Plan.*

The *Comprehensive Plan* that recognizes that most new housing development the past decade has been student housing. Now, a primary goal is to change this trend and offer a wider variety of housing options built for a broader range of people. The location of the proposed development does not meet the criteria listed in the *Comprehensive Plan* for appropriate locales for Student/Dormitory Housing. Appropriate locations are close to campus that already have a high percentage of student-oriented housing, within easy walking distance to campus, have easy access to university-provided parking, and IU transit system. The *Comprehensive Plan* redirects Student/Dormitory housing away from the areas near downtown. The proposed site is currently serviced by city buses; however, it will soon be limited when Bloomington Transit changes the routes.

Promoting more housing opportunities in urban neighborhoods close to employment, shopping, and other amenities for young professionals, workforce residents, families, residents at different stages of life and household incomes, is a primary goal of the *Comprehensive Plan*. The proposed development meets none of the provisions above. Apartments with 3-bedrooms will limit who can afford an expensive large apartment. Many people will be priced out of the proposed development.

The proposed development does not promote housing solutions that mitigate against rapid price changes in the neighborhood. To the contrary, Student/Dormitory housing will bring more short-term residents to the neighborhood. At almost 70% rental the neighborhood is at risk of destabilization. Rental for young families, workforce housing and young professionals or owner-occupied multifamily could help stabilize the neighborhood. Housing that only students will be able to afford does just the opposite.

Below are quotations from the *Comprehensive Plan* that support the objection to this development.

- *(Pg 64) Comprehensive Plan Objectives: Policy 5.3.4: Redirect new student-oriented housing developments away from the Downtown and nearby areas, and toward more appropriate location closely proximate to the IU campus that already contain a*

relatively high percentage of student-oriented housing units, are within easy walking distance to the campus, and have direct access to university-provided parking as well as the university transit system

- *(pg. 61) Housing and Neighborhood: Goals & Policies: 14: Offer a wide variety of quality housing options for all incomes, ages, and abilities.*
- *(pg. 61) Housing and Neighborhood: Policy 5.1.3: Encourage a wide range of housing types to provide a more diverse mix of housing opportunities and household income levels, preferably within neighborhoods and multi-family housing developments.*
- *(pg. 63) Housing and Neighborhood Goals & Policies: New multifamily housing projects catering largely to students must be better planned and distributed adjacent to campus or in underdeveloped commercial corridors along transit routes outside Downtown, but still relatively close to the university*
- *(pg. 63) Housing and Neighborhood Goals & Policies: 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- (pg. 60) *Housing and Neighborhood: Now that 1,900 new housing units have been constructed Downtown within the past decade (almost all of them apartments), the market dynamic is shifting. More market opportunities may exist to convert single-family homes from student-rental to owner occupied. This can allow more people to have a chance to live in urban neighborhoods, which are often closer to employment, shopping, and other amenities.*
- *(pg. 64) Housing and Neighborhood: Goal 5.4: Neighborhood Stabilization: Promote a variety of homeownership and rental housing options, mitigate against unforeseen eviction and rapid price changes, and promote opportunities for community interaction that are also aimed towards different stages of life, ages, and household incomes.*
- *(pg. 61) Housing and Neighborhood: Bloomington's older urban, small scale, compact, single family housing stock located primarily around the city center and university provide some of the city's more affordable housing stock and must be protected. Building a growing stock of affordable housing requires assuring sustainability so unaffordable stock is not the only option for future generations. Mixed income neighborhoods are fundamental to successful, sustained, affordable housing stock. New multifamily housing projects catering largely to students must be better planned and distributed adjacent to campus or in underdeveloped commercial corridors along transit routes outside Downtown, but still relatively close to the university*
- *(Pg. 65) Housing and Neighborhood: Seek to expand compact urban housing solutions such as pocket neighborhoods, tiny houses, accessory dwelling units, and similar housing solutions, in a manner that attracts workforce and senior populations or otherwise complements the surrounding neighborhood*

20.06.040(d)(6) Approval Criteria: ii. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequatelevels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

Objection

The proposed development will adversely impact the overall health and well-being of people who live in the development as well as the surrounding neighborhood. Student/Dormitory housing use at this site is not appropriate, ill-advised and will endanger public safety.

The Hillside area presents enormous infrastructure challenges. Because of the traffic, this is a dangerous location. It is especially dangerous for the intensity of use that Student/Dormitory housing triggers. If built, it will require crossing Hillside to reach on-street parking for residents and visitors. Dangerous midblock crossings will be the norm. Pedestrians crossing Hillside from the north at the signaled intersection are impeded by a utility pole installed in the middle of the narrow sidewalk before reaching the pedestrian crosswalk. The 7' tall wall obstructs sightlines in both directions at the signal. And the enormous turning radius encourages fast traffic. Hillside is narrow, lacking a tree plot, turning lane or bike lane. The Washington/Hillside intersection has extremely limited sightlines that force vehicles into the intersection and past the pedestrian crosswalk.

Mixed urban residential neighborhoods are described in the Comprehensive Plan as missing basic and essential utilities. This neighborhood is exactly such a neighborhood and has been skipped over for improvement for decades.

There are no sidewalks, storm sewers, curbs, gutters, or tree plots on Southern, Wilson, Grant, and Palmer streets. These streets are very narrow with high crowns and deep ruts on both sides, and the pavement is crumbling at the edges. Worn out water mains erupt on a regular basis in the neighborhood. The sidewalks on Hillside, Washington, and Lincoln are sub-standardly narrow with sections rated as the poorest condition in Bloomington on the *Sidewalk Inventory Report*.

The *2019 Bloomington Transportation Plan* identifies the Hillside, Walnut, Washington area as a hotspot for pedestrian/motor vehicle accidents and as one of the least connected areas on the *Bicycle Network Analysis* map. Hillside is Bloomington's main southern east/west corridor and carries a greater volume of daily traffic than is recommended for a general urban street. The traffic is extraordinarily fast and a digital traffic warning sign displaying speeds of motorist is now a permanent fixture on Hillside at Grant. As a general urban street, Hillside lacks the basic requirements such as on-street parking, 25mph speed, turning lanes, tree plots between sidewalk and street, or buffered/protected bike lanes.

The south side of Hillside is basically 2 "superblocks", each 3 blocks long with the only cross street at Grant. Grant dead ends at Southern. Washington, Lincoln, Dunn, and Palmer dead end into Hillside. Southern is blocked from Walnut just west of Grant. The superblocks lack alleys or direct access to on-street parking. The alley west of the proposed development dead ends mid-block before reaching Southern and the exit onto Hillside is very close to the intersection. The prevailing development pattern in this area is exceptionally dense at about 0.12 acres (5,227 sq. ft.) per lot and most of the houses are modest in size. The area includes owner-occupied and rental, single-family and duplex/fourplex-multifamily. The neighborhood was built before modest families owned cars and therefore the few existing driveways were retrofitted. Washington, Lincoln, and the new Dunn PUD are the only streets offering alley parking opportunities. Hillside has limited driveways and no on-street parking. Washington and Lincoln provide the only on-street parking for all the residents and visitors in the area and are routinely congested. Washington has seen an increased use since the apartment building at Driscoll and Walnut was granted a parking variance for required on-site parking.

Creating a pedestrian friendly edge to the neighborhood along Hillside will be challenging but neighbors requested, and still hope for, a subarea plan to help find solution for this problematic area. Hillside could be a true asset for the neighborhood and the city. The South Dunn PUD demonstrates how wonderfully a street can be remade.

Below are quotations from the 2019 Bloomington Transportation Plan and the Comprehensive Plan that support the objection

2019 Bloomington Transportation Plan

- *(pg. 11) Traffic Volumes: S Walnut St from E Wilson St to S Monon Dr, 2008, the average daily traffic volume was vehicles/day =27,052. General Urban Street. Auto traffic volume (ADT) should be 10,000-20,000.*
- *(pg. 14 Map) Hillside is categorized as forth busiest streets and a hotspot for motor vehicles-pedestrian crash density*
- *(pg. 18 map) Listed as one of the least connected areas on the Bicycle Network Analysis*
- *(pg. 36) General urban street specifications are: 2 auto travel lanes 10' wide, on-street parking, recommends target speed 25mph, preferred Bike facility (2 buffered or protected bike lanes)*

Comprehensive Plan

- *(pg. 63) Housing & Neighborhoods: Goals & Policies: Policy 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- *(pg. 16) UDO Objectives: Objective: 11: Ensure all land development activity makes a positive and lasting community contribution*

- *(Pg. 63) Housing & Neighborhoods: Goals & Policies: Policy 5.2.1: Evaluate all new developments and redevelopments in light of their potential to positively or adversely impact the overall health and well-being of the people who live in the surrounding neighborhood.*
- *(pg. 63) Housing & Neighborhoods: Objective 13: Embrace all of our neighborhoods as active and vital community assets that need essential services, infrastructure assistance, historic protection, and access to small-scaled mixed-use centers*
- *(pg. 64) Housing & Neighborhoods: Neighborhood Stabilization: Goal 5.4: Enhance the appearance, safety, and walkability of sidewalks, multi-use paths and trails, and streets in all neighborhoods through proactive repair and cleaning programs to reinforce an open network connecting each neighborhood to adjacent land uses and to the city as a whole*
- *(Pg. 84) Mixed Urban Residential: Land Use: Mixed Urban Residential: Additionally, many of these areas were built without essential urban amenities such as storm sewers, curbs, and sidewalks.*

20.06.040(d)(6) Approval Criteria: iii. Minimizes or Mitigates Adverse Impacts

1. *The proposed use and development will not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.*
2. *The proposed development shall not cause significant adverse impacts on surrounding properties nor create a nuisance by reason of noise, smoke, odors,vibrations, or objectionable lights.*

Objection

The proposed development would be disruptive to the established relationship between the built environment and street. The proposed development is profoundly inconsistent with the historic development pattern in the area and will affect how the street feels and is used. The jarring shift in scale, bulk and orientation of the proposed building will make reclaiming Hillside as a walkable urban asset out of reach. In addition, the shadows cast on neighboring houses will stop the possibility for owners (on the east and west) of the proposed development, to utilize solar energy in the future.

The proposed development will deprive adjacent properties of natural light.

The *Comprehensive Plan* states that existing residential neighborhoods, or any portions of a neighborhood having a consistent built character, should be maintained at their prevailing pattern of development, building distribution, and scale. Guidance for appropriate site design in mixed urban residential areas stipulates that redevelopment and rehabilitation must respect the prevailing character and development pattern of adjacent properties in the older neighborhoods. In-fill development must continue to emphasize pre-WWII neighborhood characteristics regarding building mass, scale, and other site planning features. Guidance for land use development approvals require that vacant lots be redeveloped with compatible infill that reflects the prevailing character of the neighborhood.

The orientation, scale and building distribution of the proposed Student/Dormitory housing is not compatible with the prevailing historic development pattern. The historic development pattern surrounding the proposed development is a consistent human-scale, pre-auto, 1920s pattern. The distribution of these narrow buildings is close together with small side yards between each house. The scale is small, approximately 24’ to 28’ wide with one or two stories. The orientation of the existing buildings is with the narrow wall facing the street and the long wall to the side. The neighborhood commercial buildings follow the same historic development pattern in scale, distribution, and bulk. Altogether, this historic pattern creates a human-scale and walkable environment.

The develop pattern for the proposed project is suburban. It is characterized by wide buildings that are orientated with the broad side of the building facing the street. The design of the proposed development was used to build the University Manor complex in a suburban context on the north side of Bloomington. The proposed structure is very wide, about 100’, making it approximately four times as wide as the compact urban neighborhood context. The expanse of the proposed building is contrary to the compact urban human-scale surrounding the site.

Additionally, the site for this proposal is in the Monon Historic Study district. It has been an important study area since at least 2004 when it was listed in the *City of Bloomington Interim Report*. All eight adjacent houses are listed with the state of Indiana in their *Indiana Historic Sites and Structures Inventory* as either Notable or contributing. Breaking the historic building pattern will adversely impact these properties. This is not a locally designated district, and no design regulations are required beyond what is specified in the *Comprehensive Plan* for all Mixed Urban Residential neighborhoods.

Significant adverse impact will be created by the height of the proposed building which is located at the crest of a hill and will block access to natural light on the east and west of the site. Two different façade drawings are shown in the developer's packet; one drawing shows a 3-story building and the other shows a 3.5-story building. Both drawings lack measurements for the total height of the proposed project. Regardless, the elevation of the hill exacerbates the reach the shadows cast on houses to the east and west. Owners to either side of this proposed development will be impeded by the shadows to use solar energy in the future.

Below are quotations from the Comprehensive Plan that support the objection

- *(Pg. 84) Mixed Urban Residential: Land Use Development Approvals: Vacant lots should be redeveloped with compatible infill that reflects the prevailing character of the neighborhood.*
- *(pg. 84) Mixed Urban Residential: Land Use Development Approvals: Allow context sensitive multifamily redevelopment along higher volume roads, along district edges, and near major destinations when appropriately integrated with adjacent uses and styles.*
- *(pg. 63) Housing & Neighborhoods: Policy 5.2.6: Existing residential neighborhoods, or any portions of a neighborhood having a consistent built character, should be maintained at their prevailing pattern of development, building distribution, and scale. This built character may be complemented by both traditional and contemporary architecture.*
- *(pg. 63) Housing & Neighborhoods: Policy 5.2.4: Design and arrange new multifamily buildings, including entries and outdoor spaces, so that dwellings have a clear relationship with the public street and operate on a pedestrian scale.*
- *(Pg. 84) Mixed Urban Residential: Site Design: The majority of centrally located neighborhoods have been built out, so major changes will occur with redevelopment and rehabilitation of existing structures must respect the prevailing character and development pattern of adjacent properties. Although there may be various architectural styles that would be appropriately compatible with the existing architecture in these older neighborhoods, the district must continue to emphasize pre-WWII neighborhood characteristics regarding building mass, scale, landscaping, and other site planning features.*
- *(Pg. 84) Mixed Urban Residential: Land Use Development Approvals: Allow context sensitive multifamily redevelopment along higher volume roads, along district edges, and near major destinations when appropriately integrated with adjacent uses and styles.*
- *(pg. 63) Housing & Neighborhoods: Goals & Policies Principals: 11: Ensure all land development activity makes a positive and lasting community contribution*
- *(Pg. 85) Mixed Urban Residential: Form Based Code: To better respond to the relationship of buildings to the street, architectural massing, shape and design, and the location of on-site parking. A form-based code focuses on the physical shape and configuration of the build environment rather than land uses. Using this approach can offer more predictability than flexible Planned Units Developments processes offer. This strategy should not be used exclusively but rather in balance with use-based zoning. Land use decisions should be based both on compatible uses as well as on form.*
- *(Pg 96) Focus Areas & Strategies: Focus Areas are locations expected to see significant change in land use activities over the next decade; however, they should follow their respective development themes (Maintain, Enhance, and Transform)*

iii. Minimizes or Mitigates Adverse Impacts

1. *The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.*

Although these was no requirement to meet with neighbors there was not a good-faith effort to address the concerns of the adjoining property owners when concerns were lodged through the Planning and Transportation Department.

The Unified Development Ordinance specifies that at least one sign should be posted on the property informing Bloomington residents of a proposed change in use. No notice was posted on the property.

The notice listed in the newspaper included an incorrect address for development on the parcel at 107 E Hillside. The notice to adjacent property owners also contained the wrong address.

BLOOMINGTON BOARD OF ZONING APPEALS **CASE #: V-01-22**
STAFF REPORT **DATE: February 17, 2022**
Location: 1600 S. Rogers Street

PETITIONER: Catalent Indiana, LLC
1300 S. Patterson Drive, Bloomington

CONSULTANT: Bledsoe, Riggert, Cooper, and James
1351 W. Tapp Road, Bloomington

REQUEST: The petitioner is requesting a variance from fence and wall standards, riparian buffer standards, and front parking setback requirements to allow the construction of a new parking area.

REPORT: This 7.6 acre property is located at 1600 S. Rogers Street and is located on Tract C within the Thomson PUD. The property was most recently used by IMI Materials as a gravel and concrete facility. Surrounding land uses include Hays Trucking and a Duke electrical substation to the south and east, Catalent manufacturing facility to the north, and undeveloped land within the Thomson PUD to the west. There is portion of the floodplain of West Branch of Clear Creek that encroaches onto the far eastern portion of this property.

As part of recent expansions and increased production requirements at the Catalent facilities for work associated with government contracts to manufacture the COVID-19 vaccine, the petitioner has had to substantially increase employees at the site. As a result, there is an increased demand for parking for the new employees around the facility. The petitioner has purchased this contiguous property to the south of the facility to redevelop for a new parking area. The petitioner is proposing to construct a new surface parking area with 523 parking spaces, which would also include a 7' tall fence around the perimeter. The parking area would include a minimum of 21 electric vehicle charging stations and 11 bicycle parking spaces.

The property currently shares an access drive onto Rogers Street with the trucking company to the south, which will be reconstructed with this petition in the same approximate location. The drivecut meets separation requirements from adjacent drives. The eastern portion of the proposed driveway and a new sidewalk are located in the floodplain of the West Branch of Clear Creek. Any work within the floodplain must receive a permit from Indiana Department of Natural Resources prior to issuance of any local permits.

The Catalent building to the north is approximately 600' west of Rogers Street. Since there will be portions of the proposed fence that are more than 4' tall between the building and the street, the petitioner is requesting a variance to allow for a 7' tall fence that is forward of the building façade. The petitioner is also requesting a variance from the front parking setback standards to allow for portions of the proposed parking area to not be located 20' behind the front façade of the building. Although the proposed parking area will be approximately 400' away from Rogers Street, it will extend approximately 200' forward of the building façade and therefore not meet the 20' setback behind the building front. Since there is a creek between the proposed parking area and the buildings to the north, the petitioner is proposing to construct two elevated walkways from the parking area to

the building. The creek is subject to the Riparian Buffer standards and the petitioner is requesting a variance from the riparian buffer standards to allow the construction of the walkways.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.09.130 e) Standards for Granting Variances from Development Standards:

A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) *The approval will not be injurious to the public health, safety, morals, and general welfare of the community.*

   PROPOSED FINDING:

   Front Parking Setback: The granting of the variance to allow portions of the parking to not be setback 20' from the building facade will not be injurious to the public health, safety, morals, or general welfare of the community. The location of the parking does not affect access to the main building or the interface of the site with the public way, as it is setback approximately 400' from Rogers Street.

   Fence Height: The granting of the variance to allow the fence to be 7' tall will greatly increase the security of the property to help with the production of a vaccine to address the global public health emergency. This directly promotes the public health, safety, and general welfare of the community. Additionally, the distance of the parking from Rogers Street ameliorates concerns about tall fences between buildings and the road.

   Riparian Buffer: The granting of the variance to allow the proposed minor disturbance to a small portion of the top of bank area to install the elevated walkways will not be injurious to the public health, safety, morals, or general welfare of the community. The granting of the variance would improve public safety by providing a safe way to access the building from the parking area. The construction will not be allowed without IDEM approval.

2) *The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.*

   PROPOSED FINDING:

   Front Parking Setback: No adverse impacts to the use and value of surrounding properties as a result of the requested variance are found. The parking area will be setback approximately 400' from Rogers Street and will not affect the use or value of the area surrounding the property.

   Fence Height: No adverse impacts to the use and value of surrounding properties as a result of the requested variance are found. The fence will be setback approximately 400' from

Rogers Street and the sidepath on Rogers and therefore is not expected to have a negative effect on the adjacent area.

Riparian Buffer: No adverse impacts to the use and value of surrounding properties is expected as a result of the proposed walkways and minor disturbance to the riparian buffer area. Any trees removed will be replaced and the area will be reseeded and planted with native vegetation.

3) *The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.*

PROPOSED FINDING:

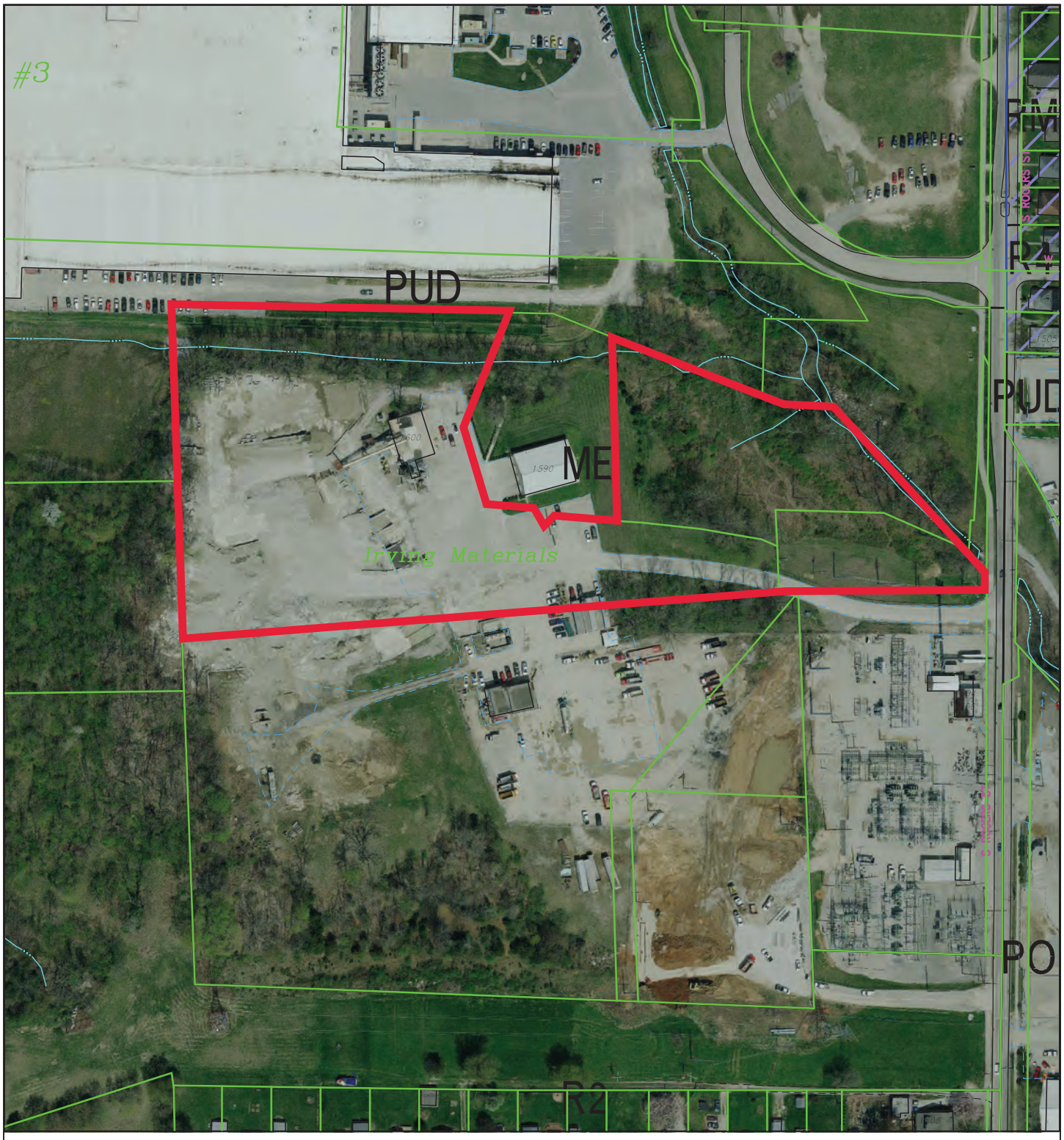
Front Parking Setback: The Department finds that the strict application of the terms of the Unified Development Ordinance will result in practical difficulties of the use of the property because it would require the parking area to be placed substantially further back into the property than is practical. The practical difficulties are peculiar condition to this property in that the adjacent building is setback approximately 600' from Rogers Street and creates a substantial restriction on the location of parking to serve the site. The granting of the variance will allow an existing substantially non-conforming site to be redeveloped according to most other current Unified Development Ordinance regulations.

Fence Height: The Department finds that the strict application of the terms of the Unified Development Ordinance will result in practical difficulties of the use of the property because it would not allow the fencing needed to provide appropriate security for this property. The practical difficulties are peculiar condition to this property in that the location of the lot in relation to the building does not allow for the parking to occur behind the building, where a 7 foot fence would be allowed. The granting of the development standards variance will allow the petitioner to meet the stated safety standards for this facility to address the public health emergency.

Riparian Buffer: The Department finds that the strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property as they would not allow the minor work necessary for the pedestrian bridges. The installation of elevated walkways in this area will not require any substantial grading or disturbance of vegetation. In addition, the Thomson PUD was approved prior to the current riparian buffer standards. The Thomson PUD also only identified the West Branch of Clear Creek as a dominant stream through this area. Peculiar condition is found in the limited amount of area along this portion of the site that is available for pedestrian crossings and that the intermittent stream along the south side of the building had been previously straightened and altered during development within the PUD. The Thomson PUD anticipated development within existing disturbed areas. The proposed encroachment is not excessive and is in keeping with the development pattern within the PUD.

RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt the proposed findings and approve V-01-22 with the following condition:

1. A permit from the Indiana Department of Natural Resources is required prior to the issuance of any permit related to the pedestrian crossings.
2. The variance approves a maximum number of parking spaces between the front building wall and Rogers Street as shown in the site plan with this application. Final site plan details will be reviewed with the minor site plan approval.
3. Disturbed areas around walkways will be replanted with native vegetation. Any trees removed in the riparian buffer area will be replaced with a 2:1 factor.
4. The variance approves a fence with a maximum height of 7 feet, and does not allow barbed wire or any other materials restricted by the Unified Development Ordinance.



City of Bloomington
Planning

By: greulice
11 Feb 22

200 0 200 400 600

Scale: 1" = 200'

For reference only; map information NOT warranted.

Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS

January 20, 2022

City of Bloomington Board of Zoning Appeals
401 N. Morton Street
Bloomington, IN 47403

RE: Request for Variances for Catalent Biologics' South Parking Lot at 1600 S. Rogers Street

Dear BZA Members:

The number of employees at Catalent Biologics continues to grow and Catalent's need for appropriate parking for their employees remains a challenge. Catalent now has 4,000 employees at their Patterson Street Campus. There are currently 896 on-site parking spaces. In an effort to address the parking problem, Catalent leases parking spaces from nearby parking lots and shuttles employees from two remote parking area.

In a continued effort to address their employee parking needs, Catalent would like to construct a new parking lot at the old concrete plant at 1600 S. Rogers Street directly south of the main campus to provide 523 new parking spaces.

On behalf of Catalent Biologics, we respectfully request your consideration of the following variances from the Unified Development Ordinance (UDO) in support of the proposed south parking lot at 1600 S. Rogers Street:

1. Development Standards & Incentives Section 20.04.020(c), General Dimensional Standards to allow for parking to extend 195 feet in front of the east face of Catalent Biologic's building to the north. The UDO parking set back for this property is 20 feet behind the front of the building. Compliance with this standard would result in a loss of 60 essential parking spaces. In this particular situation, the view of the proposed parking lot from Rogers Street is virtually obscured by Duke Energy's substation, the Hays warehouse, the curvature of the driveway, and an existing wooded area within the West Branch Clear Creek Floodway.

2. Development Standards & Incentives Section 20.04.030(f), Riparian Buffers to allow for the proposed parking improvements to extend to the northern limits of old concrete plant and preserve the 50 feet of existing riparian buffer along the creek and allow for the construction of two pedestrian bridges over the creek. The UDO requires three 25 foot wide graduated buffer zones along intermittent or perennial streams, two of which currently exist and will be preserved. The third zone is the Fridge Zone with a primary function to filter runoff before it flows toward the stream. Compliance with this standard would result in a loss of 36 essential parking spaces. In this case the runoff from the proposed improvements will be collected, filtered, and detained before release to the existing tributary to West Branch Clear Creek

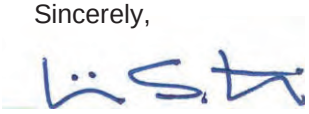
3. Development Standards & Incentives Section 20.04.080(n), Fences and Walls to allow for the installation of a seven foot tall chain link perimeter security fence extending east beyond east face of Catalent Biologic's building to the north. The UDO limits the height of fences located in front of the face of a building fronting a street to four feet. Unfortunately, a four foot high fence does not provide an adequate level of security to the proposed parking lot and protection of Catalent employees parking there. As noted in Item 1, this parking lot is relatively obscured and the fencing will not be noticeable from Rogers Street.

We believe that for each of the variances we are requesting the approval will not be injurious to the public health, safety, morals, and general welfare of the community; the use of value of the area adjacent to the Catalent property will not be affected in a substantially adverse manner; and the strict application of the terms of the UDO results in practical difficulties for the use of the property. These difficulties, including

the need to provide as many secure and safe parking spaces as possible for the ever growing Catalent work force, are peculiar to Catalent Biologics' success in our community. The variances we are seeking from the development standards will relieve those practical difficulties.

Your positive consideration of this request is greatly appreciated.

Sincerely,



William S. Riggert, PE

BLOOMINGTON

Eric Greulich <greulice@bloomington.in.gov>

BRCJ 10563.2 - Catalent South Parking Lot | BZA Filing - Supplemental Information

William Riggert <wriggert@brcjcivil.com> Fri, Jan 28, 2022 at 5:36 PM
To: Eric Greulich <greulice@bloomington.in.gov>
Cc: "Echols, Grant" <Grant.Echols@catalent.com>, "Boggs, Mike" <Mike.Boggs@catalent.com>, Angie Day <aday@m-n-a.com>, "P.J. Youngman" <pyoungman@m-n-a.com>, Liz Sacks <lsacks@brcjcivil.com>

Good afternoon Eric,

Attached, please find the site landscape plan and photometric plan for the Catalent South Parking Lot project. You will also find a revised site plan illustrating the proposed property line shift for the Hays Warehouse site.

In addition, we determined the following open space percentages:

Revised Hays lot

- Overall Area: 57,447 sq.ft.
- Open Space Area: 27,295 sq.ft.
- Open Space: 47.5%

Revised Catalent lot

- Overall Area: 333,109 sq.ft.
- Open Space Area: 150,304 sq.ft.
- Open Space: 45.1%

Catalent Campus - Patterson Drive

- Overall Area: 2,152,539 sq.ft.
- Open Space Area: 647,153 sq.ft.
- Open Space: 30.1%

Combined Catalent Properties

- Overall Area: 2,485,648 sq.ft.
- Open Space Area: 797,457 sq.ft.
- Open Space: 32.1%

Please let us know if you have any questions.

Thank,

Bill

William S. Riggert, PE | Principal
wriggert@brcjcivil.com

Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS

Office: 812-336-8277 | Fax: 812-336-0817
1351 West Tapp Road, Bloomington, Indiana 47403
brcjcivil.com

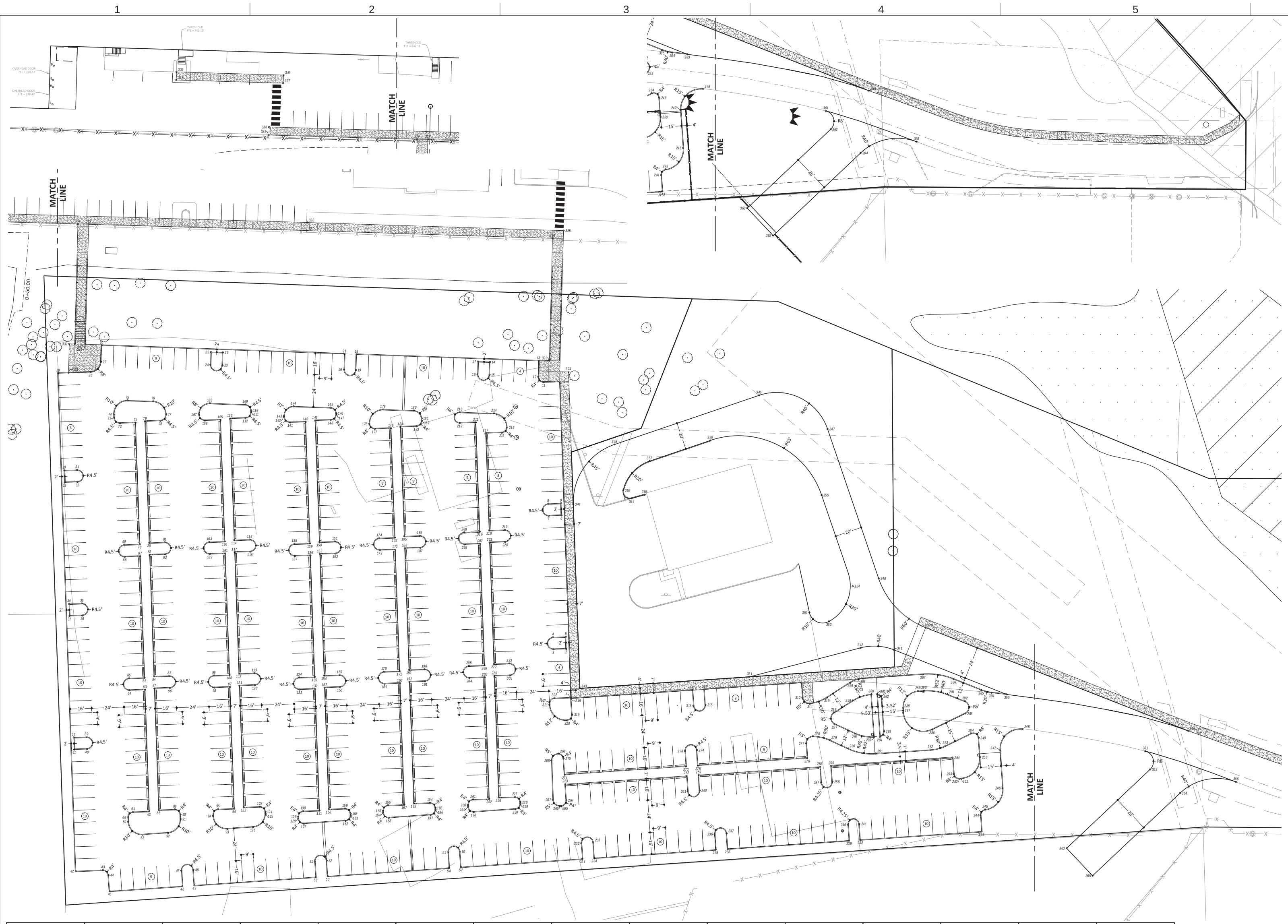
3 attachments

BRCJ 10563.2 - Calalent S Parking Lot - C701 Site Landscape Plan_2022-01-28.pdf
2896K

2022.01.11 South Parking Lot Photmetrics.pdf

144K

BRCJ 10563.2 - Catalent S Parking Lot - C401 Site Improvement Plan w Hays PL Shift_2022-01-28.pdf
1158K



GENERAL NOTES

A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENCY, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR FENCELINE, UNLESS OTHERWISE NOTED. CURB RETURN RADII ARE TO FACE OF CURB. COORDINATE DIMENSIONS WITH ARCHITECTURAL. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

C. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

D. SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

E. ALL STREET CUTS FOR UTILITIES AND OTHER IMPROVEMENTS SHALL BE REPAIRED TO MATCH EXISTING PAVEMENT SECTION OR BETTER.

PLAN NOTES

LEGEND

- LIMITS OF NEW ASPHALT SIDEPATH
- LIMITS OF NEW 4" THICK CONCRETE PAVING
- PAVEMENT STRIPING 2' O.C.
- LIMITS OF ASPHALT PAVEMENT PATCH

SCALE: 1" = 30'

NORTH

LAYOUT POINTS

POINT #	NORTHING	EASTING
1	1421356.080	3106420.016
2	1421391.987	3106416.741
3	1421391.650	3106407.247
4	1421400.644	3106406.928
5	1421400.981	3106416.422
6	1421490.925	3106413.233
7	1421490.588	3106403.739
8	1421499.582	3106403.420
9	1421499.919	3106412.914
10	1421589.933	3106411.724
11	1421589.518	3106400.025
12	1421593.658	3106395.886
13	1421605.356	3106396.302
14	1421604.637	3106360.254
15	1421595.143	3106359.916
16	1421595.463	3106350.922
17	1421604.957	3106351.260
18	1421610.154	3106261.388
19	1421598.661	3106260.979
20	1421598.981	3106251.984
21	1421610.474	3106252.393
22	1421611.674	3106162.379
23	1421602.180	3106162.041
24	1421602.500	3106153.047
25	1421611.994	3106153.385
26	1421616.871	3106072.507
27	1421604.751	3106072.076
28	1421597.040	3106064.364
29	1421596.186	3106040.269
30	1421524.302	3106044.819
31	1421524.638	3106054.313
32	1421515.644	3106054.632
33	1421515.307	3106045.138
34	1421425.364	3106048.327
35	1421425.701	3106057.821
36	1421416.706	3106058.140
37	1421416.370	3106048.646
38	1421326.426	3106051.835
39	1421326.763	3106061.330
40	1421317.768	3106061.648
41	1421317.432	3106052.154
42	1421227.417	3106053.345
43	1421228.131	3106073.466
44	1421224.407	3106077.598
45	1421212.568	3106078.408
46	1421216.255	3106132.282
47	1421227.728	3106131.497
48	1421228.343	3106140.476
49	1421216.870	3106141.261
50	1421223.015	3106231.051
51	1421234.488	3106230.266
52	1421235.102	3106239.245
53	1421223.608	3106240.032
54	1421229.772	3106329.820
55	1421241.247	3106329.035
56	1421241.862	3106338.014
57	1421230.389	3106338.799
58	1421254.328	3106102.751
59	1421263.950	3106092.075
60	1421267.175	3106091.960
61	1421271.314	3106095.816
62	1421271.739	3106107.809
63	1421361.683	3106104.619
64	1421361.275	3106093.126
65	1421370.269	3106092.808
66	1421370.677	3106104.300
67	1421460.620	3106101.111
68	1421460.213	3106089.618
69	1421469.207	3106089.299
70	1421469.615	3106100.792
71	1421559.558	3106097.603
72	1421559.151	3106086.110
73	1421563.488	3106081.453
74	1421565.815	3106081.371
75	1421576.163	3106091.720
76	1421575.486	3106110.756
77	1421565.846	3106120.394
78	1421560.970	3106116.064
79	1421560.563	3106104.571
80	1421470.619	3106107.761
81	1421471.027	3106119.254
82	1421462.032	3106119.572
83	1421461.625	3106108.080
84	1421371.681	3106111.269
85	1421372.089	3106122.762
86	1421363.094	3106123.081
87	1421362.687	3106111.588
88	1421272.743	3106114.777
89	1421273.169	3106126.770
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91	1421265.957	3106131.028
92	1421255.626	3106121.717
93	1421258.631	3106165.638
94	1421268.254	3106154.962
95	1421273.339	3106158.784
96	1421273.764	3106170.776
97	1421363.708	3106167.587
98	1421363.300	3106156.094
99	1421372.295	3106155.775
100	1421372.702	3106167.268
101	1421462.646	3106164.079
102	1421462.238	3106152.586
103	1421471.233	3106152.267
104	1421471.640	3106163.760
105	1421561.584	3106160.570
106	1421561.176	3106149.078
107	1421565.716	3106144.414
108	1421573.994	3106152.693
109	1421573.059	3106178.995
110	1421568.721	3106183.332
111	1421567.652	3106183.370
112	1421562.995	3106179.032
113	1421562.588	3106167.539
114	1421472.644	3106170.729
115	1421473.052	3106182.221
116	1421464.058	3106182.540
117	1421463.650	3106171.047
118	1421373.707	3106174.237
119	1421374.114	3106185.730
120	1421365.120	3106186.049
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122	1421274.769	3106177.745
123	1421275.194	3106189.738
124	1421271.338	3106193.877
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126	1421259.929	3106184.604
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129	1421267.758	3106218.019
130	1421271.897	3106221.875
131	1421272.322	3106233.867
132	1421362.265	3106230.678
133	1421361.858	3106219.185
134	1421370.852	3106218.866
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137	1421460.796	3106215.677
138	1421469.790	3106215.358
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153	1421462.208	3106234.138
154	1421372.264	3106237.328
155	1421372.672	3106248.820
156	1421363.677	3106249.139
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161	1421268.762	3106257.008
162	1421264.630	3106253.283
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168	1421366.569	3106293.565
169	1421366.162	3106282.072
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172	1421465.507	3106290.056
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186	1421475.913	3106308.199
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188	1421466.511	3106297.025
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191	1421367.981	3106312.026
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199	1421274.969	3106343.842
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201	1421280.505	3106347.649
202	1421280.930	3106359.641
203	1421370.873	3106356.452
204	1421370.466	3106344.959
205	1421379.460	3106344.640
206	1421379.868	3106356.133
207	1421469.811	3106352.943
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210	1421478.805	3106352.624
211	1421559.755	3106349.754
212	1421559.329	3106337.762
213	1421567.413	3106337.759
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218	1421479.810	3106359.593
219	1421480.217	3106371.086
220	1421471.223	3106371.405
221	1421470.815	3106359.912
222	1421380.872	3106363.102
223	1421381.279	3106374.594
224	1421372.285	3106374.913
225	1421371.878	3106363.421
226	1421281.934	3106366.610
227	1421282.359	3106378.602
228	1421278.504	3106382.742
229	1421277.370	3106382.782
230	1421273.238	3106379.057
231	1421236.534	3106428.589
232	1421248.007	3106427.804
233	1421248.622	3106436.783
234	1421237.148	3106437.568
235	1421243.294	3106527.358
236	1421254.767	3106526.573
237	1421255.381	3106535.552
238	1421243.908	3106536.337
239	1421250.053	3106626.127
240	1421261.776	3106625.325
241	1421262.356	3106633.805
242	1421250.634	3106634.607
243	1421256.779	3106724.397
244	1421268.799	3106723.574
245	1421273.033	3106727.009
246	1421288.912	3106739.890
247	1421316.833	3106737.979
248	1421332.737	3106754.841
249	1421326.135	3106722.307
250	1421311.831	3106723.286
251	1421295.842	3106709.345
252	1421295.747	3106707.950
253	1421299.464	3106703.686
254	1421311.436	3106702.867
255	1421305.291	3106613.077
256	1421293.568	3106613.879
257	1421292.988	3106605.399
258	1421304.711	3106604.597
259	1421298.566	3106514.807
260	1421287.092	3106515.592
261	1421286.478	3106506.613
262	1421297.951	3106505.828
263	1421291.806	3106416.038
264	1421279.834	3106416.857
265	1421275.570	3106413.139
266	1421275.494	3106412.031
267	1421280.305	3106406.693
268	1421309.303	3106405.665
269	1421314.460	3106411.107
270	1421310.749	3106414.741
271	1421298.790	3106415.560
272	1421304.935	3106505.350
273	1421316.408	3106504.564
274	1421317.022	3106513.543
275	1421305.549	3106514.329
276	1421311.080	3106595.140
277	1421321.995	3106594.393
278	1421327.337	3106599.382
279	1421324.590	3106611.913
280	1421318.307	3106625.569
281	1421314.560	3106645.992
282	1421317.340	3106686.613
283	1421320.283	3106697.668
284	1421329.461	3106716.570
285	1421344.140	3106712.461
286	1421332.190	3106687.848
287	1421344.659	3106666.331
288	1421348.011	3106666.102
289	1421360.803	3106677.254
290	1421361.110	3106681.750
291	1421358.399	3106699.194
292	1421353.288	3106712.116
293	1421331.024	3106652.229
294	1421326.834	3106649.047
295	1421326.523	3106644.976
296	1421329.209	3106630.585
297	1421336.141	3106615.518
298	1421344.898	3106614.919
299	1421353.818	3106628.900
300	1421358.446	3106642.820
301	1421358.720	3106646.826
302	1421354.968	3106650.590
303	1421358.250	3106743.070
304	1421359.505	3106731.871
305	1421361.422	3106724.177
306	1421369.558	3106703.608
307	1421373.082	3106680.930
308	1421370.046	3106636.569
309	1421366.954	3106627.178
310	1421355.850	3106609.774
311	1421351.356	3106597.228
312	1421355.979	3106591.641
313	1421366.920	3106590.892
314	1421362.004	3106519.060
315	1421350.531	3106519.845
316	1421349.916	3106510.866
317	1421361.390	3106510.081
318	1421355.244	3106420.291
319	1421343.272	3106421.111
320	1421339.009	3106417.393
321	1421350.529	3106404.203
322	1421355.655	3106408.023
323	1421605.644	3106404.141
324	1421597.262	3106418.411
325	1421701.898	3106414.698
326	1421696.165	3106406.543
327	1421701.945	3106224.437
328	1421707.936	3106224.820
329	1421706.584	3106062.869
330	1421617.692	3106060.510
331	1421596.458	3106047.943
332	1421618.012	3106048.514
333	1421617.906	3106052.513
334	1421706.794	3106054.871
335	1421709.950	3105944.917
336	1421715.948	3105945.088
337	1421748.368	3105955.777
338	1421750.701	3105876.501
339	1421756.706	3105876.641
340	1421754.365	3105955.953
341	1421391.284	3106659.560
342	1421392.792	3106634.748
343	1421362.705	3106426.785
344	1421499.232	3106421.944
345	1421543.431	3106452.428
346	1421579.861	3106559.556
347	1421554.931	3106610.283
348	1421444.212	3106648.136
349	1421407.782	3106682.957
351	1421371.301	3106552.377
352	1421419.020	3106596.845
353	1421412.360	3106611.342
354	1421438.431	3106628.976
355	1421505.950	3106605.893
356	1421546.462	3106523.461
357	1421531.166	3106478.480
358	1421509.448	3106458.894
359	1421503.514	3106465.096
360	1421506.196	3106474.832
361	1421316.278	3106845.666
362	1421302.699	3106849.225
363	1421244.322	3106787.406
364	1421285.105	3106871.376
365	1421223.964	3106806.630
366	1421293.477	3106912.882

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BRCJ Project No: 10563.2

Certified By

Catalent Pharma Solutions
South Parking Lot Project
Bloomington, IN
47402

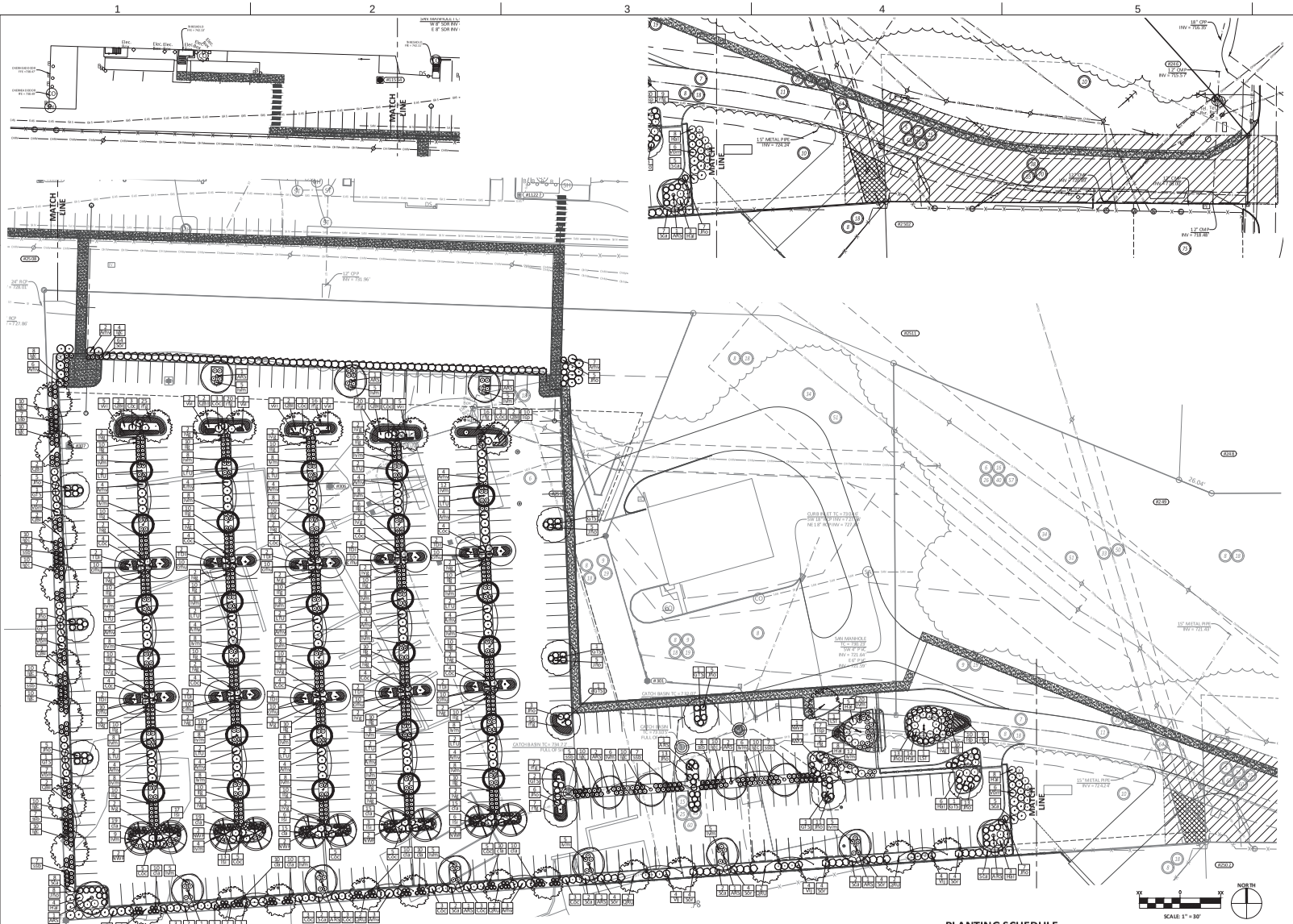
MARK	DATE	DESCRIPTION

REVISION BLOCK

PROJECT NO: 2021112
DATE: 01.20.2022
DRAWN BY: DLN
CHK'D BY: WSR

SHEET TITLE
SITE IMPROVEMENT PLAN

C401



GENERAL NOTES

A. THE CONTRACTOR SHALL LOCATE ALL UTILITIES AND VERIFY SITE CONDITION INFORMATION ON DRAWINGS PRIOR TO STARTING WORK AND PROMPTLY REPORT ANY DISCREPANCIES OR DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLAN TO THE DESIGNER AND OWNER. THE OWNER IS NOT RESPONSIBLE FOR UNAUTHORIZED CHANGES OR EXTRA WORK REQUIRED TO CORRECT UNREPORTED DISCREPANCIES.

B. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES AND CONDITIONS SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN ON THE LANDSCAPE PLAN. PLANT MATERIAL QUANTITIES SHOWN ON PLAN TAKE PRECEDENCE OVER THOSE IN THE PLANT LIST.

C. ALL PLANT MATERIAL SHALL CONFORM TO ANSI Z 60.1996 AND CURRENT ASSOCIATION OF AMERICAN NURSERYMEN STANDARDS. NO PARK GRADE MATERIAL SHALL BE ACCEPTED.

D. SPECIMEN SIZES INDICATED ON PLANT SCHEDULE ARE MINIMUM ACCEPTABLE SIZES. LARGER SPECIMENS MAY BE UTILIZED.

E. ALL PLANTING MASSES SHALL BE CONTAINED WITHIN MULCH BEDS AND RECEIVE 3" THICK SHREDDED HARDWOOD MULCH. ALL TREES OUTSIDE PLANTING BED AREAS SHALL RECEIVE A 5' MIN. DIAMETER MULCH RING AT BASE.

F. ALL LANDSCAPED AREAS NOT BARK MULCHED SHALL BE SEEDED OR SODDED AS INDICATED, UNLESS NOTED OTHERWISE. ALL OTHER AREAS DISTURBED, GRADED OR OTHERWISE MODIFIED BY NEW CONSTRUCTION SHALL RECEIVE 4" OF TOP SOIL, SEED AND MULCH. SEE SPECIFICATIONS FOR SEEDING REQUIREMENTS.

G. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THE PLANT'S ORIGINAL GRADE PRIOR TO DIGGING. ALL PLANTS SHALL BE SET PLUMB, UNLESS NOTED OTHERWISE. IT IS THE CONTRACTOR'S OPTION TO STAKE TREES. HOWEVER, IT SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL THE END OF CONTRACTED GUARANTEE PERIOD.

H. ALL PLANTINGS SHALL BE WATERED DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. WATER THOROUGHLY TO ENSURE ALL AIR POCKETS ARE REMOVED AROUND ROOT BALL.

I. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING PLANT MATERIAL UNTIL TIME OF ACCEPTED ESTABLISHMENT.

J. ALL PLANTING BED EDGES TO BE SPADE CUT UNLESS SPECIFIED WITH 4INSW STRIP OR OTHER INSTALLED EDGING.

K. PLACE BIODEGRADABLE STRAW BLANKET NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL ON SLOPES OF 5:1 (HORIZONTAL TO VERTICAL) OR ALL OTHERWISE INDICATED OR DIRECTED BY ENGINEER.

L. COORDINATE LANDSCAPE PLAN WITH ALL WATER QUALITY AND EROSION CONTROL MEASURES.

M. IF OWNER REQUESTS, PLANTS SHALL BE STAKED AND/OR FIELD-LOCATED BY DESIGNER AND CONTRACTOR. FINAL LOCATIONS OF TREES SHOULD BE ADJUSTED IF NEEDED TO AVOID OVERHEAD AND UNDERGROUND UTILITIES.

N. ANY PLANT MATERIAL SUBSTITUTIONS INSTALLED WITHOUT APPROVAL FROM DESIGNER AND/OR OWNER SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

O. ALL PLANTING MATERIALS, REGARDLESS OF SIZE SPECIFIED, SHALL BE OF SIZES THAT COMPLY WITH CITY OF BLOOMINGTON UDO LANDSCAPING STANDARDS.

P. NO HEAVY MACHINERY/EQUIPMENT SHALL BE USED WITHIN ROOT ZONES OF EXISTING TREES THAT ARE TO REMAIN, EXCEPT WHERE DISTURBANCE IS INDICATED. CONTRACTOR SHALL ENSURE EXISTING TREES TO REMAIN ARE PROTECTED AND FULLY PRESERVED DURING THE CONSTRUCTION/GRADING PROCESS.

PLAN NOTES

1. SOD OVER 6" OF TOPSOIL TO COVER GRADED AREA. NOTCH SOD AT INTERFACE WITH EXISTING TURF TO MATCH ELEVATION.
2. SEED AND MULCH OVER 6" OF TOPSOIL TO COVER GRADED AND DISTURBED AREAS. - REFER TO SPECIFICATIONS.

LANDSCAPE CALCULATIONS

DIMENSIONAL STANDARDS:
331,309 SQ FT — LOT AREA
156,654 SQ FT — LANDSCAPE AREA (45.3%)

PARKING LOT PERIMETER:
520 TOTAL SPACES @ 1 TREE/ 4 SP: — MIN 47 TREES (23 REQ'D LESS 1 EXISTING VEG. SUBSTITUTION, 925 BELOW)
520 TOTAL SPACES @ 5 SHRUBS/ 1 SP: — MIN. 1,334 SHRUBS REQ'D (1,180 REQ'D LESS 15% GRASS AND PERENNIAL SUBSTITUTION)

PARKING LOT ISLANDS:
PROVIDED 925 EVERY 10 SPACES — MIN 52 TREES

INTERIOR PLANTING:
5.40 ACRES LANDSCAPE AREA
2.1 EXISTING WOODED AREA EXCEEDS MIN'D 54 TREES AND 93 SHRUBS.

SUBSTITUTIONS FOR EXISTING VEGETATION:
9 EXISTING TREES AT 12" DBH @ 1 TREE/ 4 — 24 TREES
10 EXISTING TREES AT >12" DBH @ 4 TREES EACH — 50 TREES

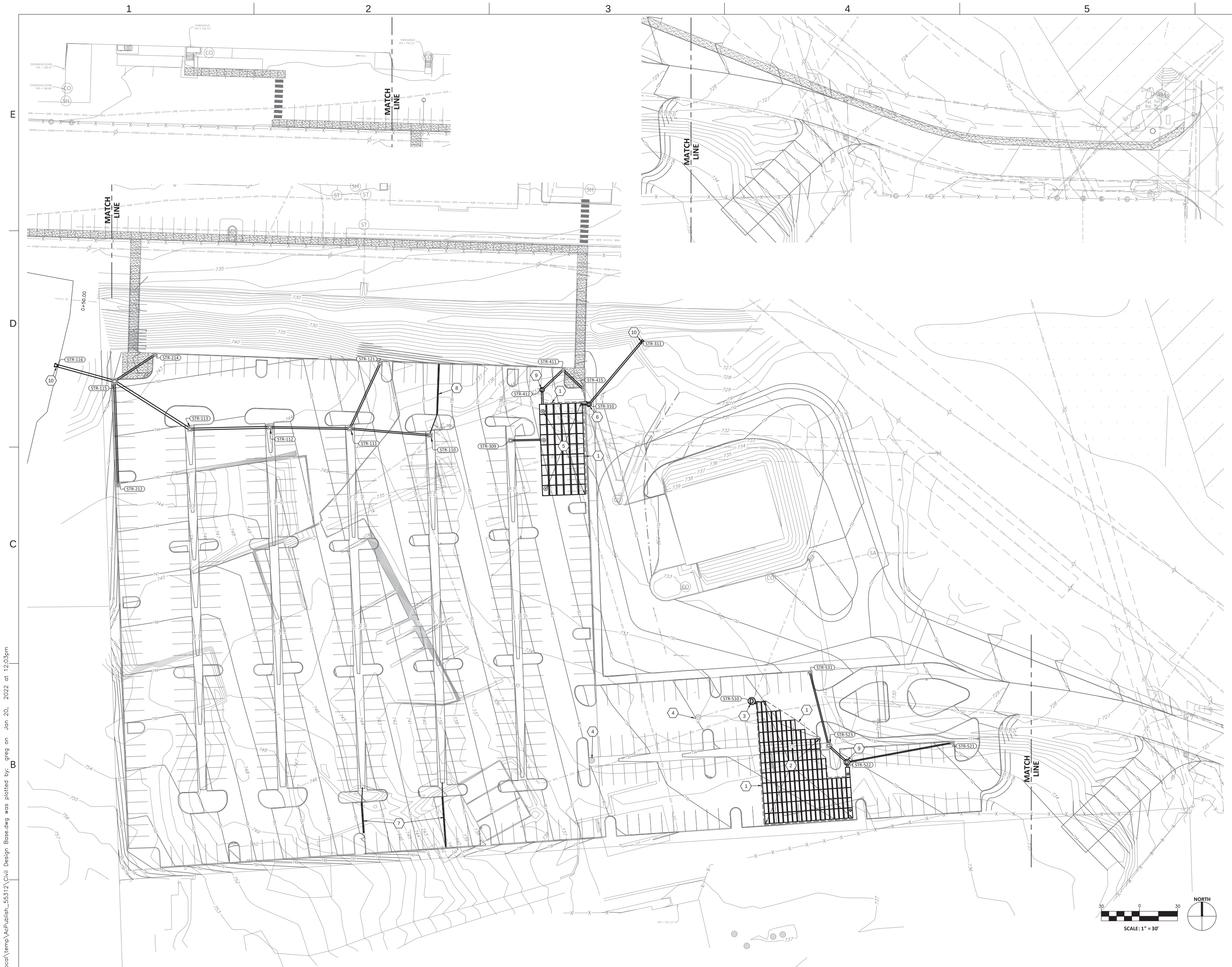
LEGEND

QTY — PLANT QUANTITY KEY

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC 8-1-26,
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING DAYS
BEFORE COMMENCING WORK.

PLANTING SCHEDULE

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
CANOPY TREES						
AUTU	11	Acer rubrum 'Autumn Blaze'	Autumn Blaze Maple	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
LITU	11	Liriodendron tulipifera 'Emerald Elegance'	Emerald Elegance Tulip Poplar	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
LITU	11	Liriodendron tulipifera 'Fastigiatum'	Fastigiate Tulip Poplar	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
NYSY	11	Nyssa sylvatica 'Wildfire'	Wildfire Tupelo	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
QUBI	18	Quercus bicolor	Swamp White Oak	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
QURU	11	Quercus rubra	Northern Red Oak	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
TIAM	10	Tilia x americana 'Redmond'	Redmond Linden	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
ORNAMENTAL TREES						
AMLA	10	Amelanchier laevis 'Cumulus'	Cumulus Serviceberry	6' Tall	As shown	Multi-stem
CECA	10	Cercis canadensis 'Rising Sun'	Rising Sun Redbud	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
CRVI	10	Crataegus viridis 'Winter King'	Winter King Hawthorn	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
MAS	10	Malus sargentii 'Tina'	Tina Sargent Crabapple	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
SYRE	10	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
EVERGREEN TREES						
PIAB	10	Picea abies	Norway Spruce	6' Tall	As shown	B&B
PIGL	10	Picea glauca 'Densata'	Black Hills Spruce	6' Tall	As shown	B&B
SHRUBS						
BUFL	10	Buddleia x 'Flutterby Petite Ruby'	Flutterby Petite Ruby Butterfly Bush	3 Gal. Min.	3' O.C.	Container
CAAL	10	Callicarpa dichotoma 'Issai'	Issai Purple Beautyberry	3 Gal. Min.	3' O.C.	Container
CAAL	10	Callicarpa dichotoma 'Early Amethyst'	Early Amethyst Purple Beautyberry	3 Gal. Min.	3' O.C.	Container
CAAL	10	Callicarpa dichotoma 'Duet'	Duet Purple Beautyberry	3 Gal. Min.	3' O.C.	Container
CAAL	10	Callicarpa dichotoma 'Pearl Glow'	Pearl Glow Purple Beautyberry	3 Gal. Min.	3' O.C.	Container
CAAL	10	Callicarpa dichotoma 'Welchii'	Welchii



SCALE: 1" = 30'

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

GENERAL NOTES

PLAN NOTES ⟨1⟩

1. 4" DIAMETER DUAL WALL PERFORATED HDPE TYPE S SUBDRAIN COLLECTOR PIPING. SET INVERT EQUAL TO BOTTOM OF DETENTION SYSTEM DRAIN ROCK BASE LAYER. CONNECT TO OUTLET CONTROL STRUCTURE AS INDICATED.
2. PARKING LOT UNDERGROUND DETENTION SYSTEM. TOTAL 157 STORMCHAMBER SC-1820 STORAGE UNITS WITH CLEAN INDOT NO. 8 STONE BACKFILL - OR APPROVED EQUIVALENT WITH MINIMUM STORAGE VOLUME = 6,760 CUBIC FEET. PROVIDE 10" DIAMETER INSPECTION AND CLEANOUT RISERS CENTERED OVER SEDIMENTRAP SUMPS AS INDICATED. REFER TO PROFILE SD-5, SHEET C602.
3. REMOVE EXISTING INLET STRUCTURE AND INSTALL NEW 60" MANHOLE STRUCTURE STR-510 ON EXISTING RCP STORM DRAIN PIPES. PROVIDE CONNECTIONS FOR 4" PERFORATED UNDERDRAIN AND 8" LATERAL FROM ADJACENT UNDERGROUND DETENTION SYSTEM. REFER TO ENLARGEMENT, SHEET C602.
4. CLEAN ACCUMULATED SEDIMENT FROM EXISTING INLET STRUCTURES AND CONNECTING DRAIN PIPE SYSTEM. REMOVE INLET GRATES AND INSTALL H-20 LOAD RATED SOLID COVERS, ADJUST TO FINISH GRADE.
5. PARKING LOT UNDERGROUND DETENTION SYSTEM. TOTAL 54 STORMCHAMBER SC-34E STORAGE UNITS WITH CLEAN INDOT NO. 8 STONE BACKFILL - OR APPROVED EQUIVALENT WITH MINIMUM STORAGE VOLUME = 6,596 CUBIC FEET. PROVIDE 10" DIAMETER INSPECTION AND CLEANOUT RISERS CENTERED OVER SEDIMENTRAP SUMPS AS INDICATED
6. 48" MANHOLE STRUCTURE STR-310. REFER TO ENLARGEMENT, SHEET C602, FOR ARRANGEMENT OF CONNECTING PIPES.
7. TRENCH DRAIN ACO SK2-00, OR ABT POLYDRAIN WITH 6" CONSTANT CHANNEL DEPTH. PROVIDE 4" SDR 35 PVC OUTLET PIPE THROUGH ADJACENT CURB AT 1% MINIMUM SLOPE, DISCHARGING TO SWALE AS INDICATED.
8. TRENCH DRAIN ACO SK2-00, OR ABT POLYDRAIN WITH VARIABLE CHANNEL DEPTH. PROVIDE 4" SDR 35 PVC OUTLET PIPE THROUGH ADJACENT CURB AT 1% MINIMUM SLOPE, DISCHARGING TO STR-110 AS INDICATED.
9. 4' DIAMETER HYDRO INTERNATIONAL FIRST DEFENSE HIGH CAPACITY WATER QUALITY UNIT WITH SOLID COVER - OR APPROVED EQUAL WITH MINIMUM TREATMENT FLOW RATE OF 1.0 CFS, AND INTERNAL PEAK FLOW BYPASS CAPACITY OF 6.8 CFS.
10. GALVANIZED METAL END SECTION WITH RIPRAP EROSION CONTROL. REFER TO DETAIL.

LEGEND

Symbol	Description
(dense stipple)	LIMITS OF NEW ASPHALT PAVEMENT
(sparse stipple)	LIMITS OF NEW 4" THICK CONCRETE PAVING
(diagonal hatch)	PAVEMENT STRIPING 2' O.C.
(crosshatch)	LIMITS OF ASPHALT PAVEMENT PATCH

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BRCJ Project No: 10563.2

Certified By

Catalent Pharma Solutions
South Parking Lot Project
Bloomington, IN
47402

MARK	DATE	DESCRIPTION

REVISION BLOCK

PROJECT NO: 2021112
DATE: 01.20.2022
DRAWN BY: AEK
CHK'D BY: WSR

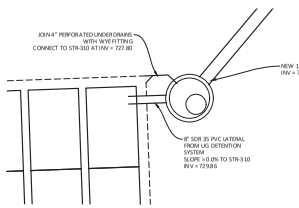
SHEET TITLE
SITE UTILITIES PLAN

C601

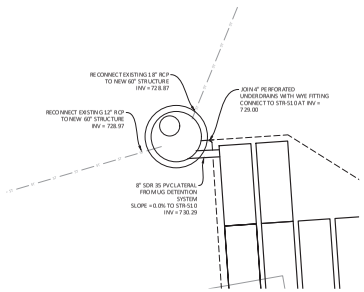
30 x 42 Drawing: C:\Users\greg\appdata\local\temp\AcPublish_55312\Civil Design Base.dwg was plotted by: greg on Jan 20, 2022 at 12:03pm

STORM STRUCTURE DATA TABLE											
STR #	CASTING	STRUCTURE TYPE / DETAIL	REFERENCE PROFILE	NORTHING EASTING	RIM ELEV	PIPE SIZE	PIPE INV (OUT)	DOWN STR #	PIPE LENGTH	PIPE SLOPE %	NOTES
STR–110	EJW 6500 DITCH GRATE	INLET TYPE A	SD–1	1421552.54 3106280.49	738.33	12"	736.65	STR–111	63.49	0.50%	
STR–111	EJW 1020 W/ BEEHIVE GRATE	48" MANHOLE	SD–1	1421557.75 3106227.21	741.21	12"	736.23	STR–112	63.10	0.70%	
STR–112	EJW 1020 W/ BEEHIVE GRATE	48" MANHOLE	SD–1	1421558.83 3106184.11	743.47	15"	735.54	STR–113	62.93	0.66%	
STR–113	EJW 1020 W/ BEEHIVE GRATE	48" MANHOLE	SD–1	1421557.37 3106101.20	743.26	18"	734.87	STR–115	70.22	0.50%	
STR–115	EJW 7510 CURB INLET	48" MANHOLE	SD–1	1421596.02 3106041.93	742.82	18"	734.43	STR–116	46.24	2.00%	
STR–116	––	18" FLARED METAL END SECTION	SD–1	1421607.21 3105987.34	––	18"	733.51	––	––	––	
STR–121	EJW 7505 CURB INLET	INLET TYPE J	SD–1	1421608.97 3106251.02	740.22	12"	737.91	STR–111	56.48	0.96%	
STR–212	EJW 7505 CURB INLET	INLET TYPE J	SD–2	1421513.51 3106044.74	745.02	12"	741.95	STR–115	81.58	2.53%	
STR–214	EJW 7505 CURB INLET	INLET TYPE J	SD–2	1421615.97 3106073.95	742.41	12"	739.75	STR–115	38.26	0.95%	
STR–309	EJW 6500 DITCH GRATE	INLET TYPE A	SD–3	1421548.47 3106353.71	735.42	10"	731.22	––	23.72	6.07%	1
STR–310	EJW 1020 W/ SOLID COVER	48" MANHOLE	SD–3	1421576.89 3106415.50	733.52	12"	727.70	STR–311	64.29	1.09%	2
STR–311	––	12" FLARED METAL END SECTION	SD–3	1421626.08 3106456.88	––	12"	727.00	––	––	––	
STR–411	EJW 7505 CURB INLET	INLET TYPE J	SD–4	1421604.02 3106395.13	733.49	12"	730.34	STR–412	22.77	4.62%	
STR–412	Standard	48" FIRST DEFENSE WQ UNIT	SD–4	1421588.36 3106378.63	734.51	12"	729.19	––	11.44	6.92%	3
STR–415	EJW 7505 CURB INLET	INLET TYPE J	SD–4	1421588.68 3106411.20	732.93	12"	730.67	STR–411	22.23	1.00%	
STR–510	EJW 1020 SOLID COVER	60" MANHOLE	––	1421343.24 3106543.67	733.16	18"	728.87	EXISTING	123.10	1.15%	2
STR–521	EJW 7505 CURB INLET	INLET TYPE J	SD–5A	1421310.37 3106701.52	731.80	8"	730.42	STR–522	84.22	0.50%	
STR–522	SOLID COVER	48" FIRST DEFENSE WQ UNIT	SD–5	1421295.10 3106618.70	733.09	12"	730.00	––	3.99	1.25%	3
STR–523	EJW 6610 DITCH GRATE	INLET TYPE E	SD–5	1421308.18 3106604.19	732.45	12"	730.08	STR–522	19.54	0.41%	
STR–531	EJW 7505 CURB INLET	INLET TYPE J	SD–5	1421365.80 3106589.52	732.09	10"	730.51	STR–523	59.54	0.65%	

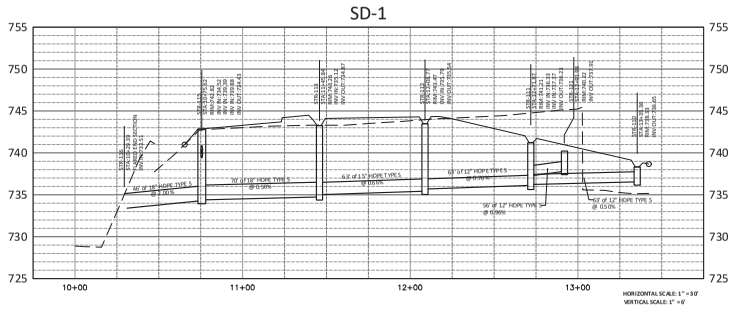
STRUCTURE DATA TABLE NOTES
1. PROVIDE 24" SUMP BELOW LOWEST CONNECTING INVERT ELEVATION. CONNECT OUTLET PIPE TO UNDERGROUND DETENTION SYSTEM. REFER TO PROFILE SD–3, THIS SHEET.
2. REFER TO ENLARGEMENT, THIS SHEET
3. CONNECT OUTLET PIPE TO UNDERGROUND DETENTION SYSTEM.

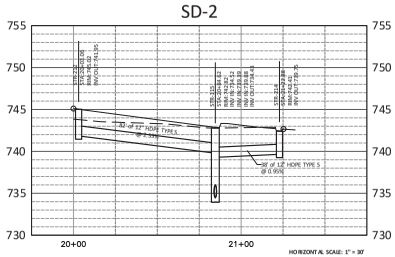


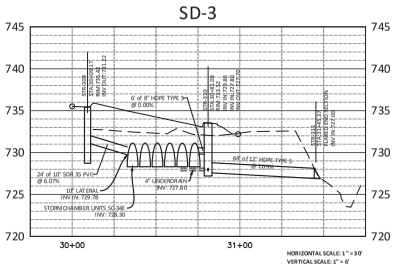
STR-310 ENLARGEMENT
SCALE: 1" = 5'

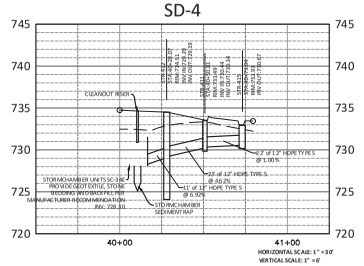


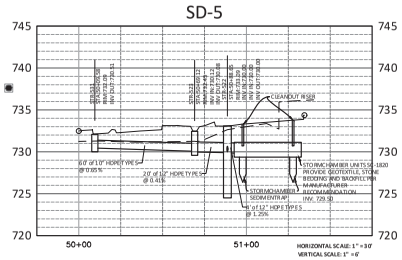
STR-510 ENLARGEMENT
SCALE: 1" = 5'

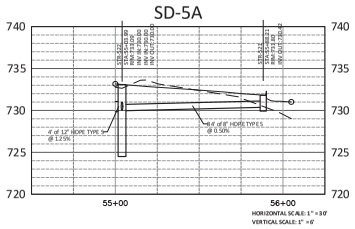












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BRCI Project No: 10563.2

Certified By

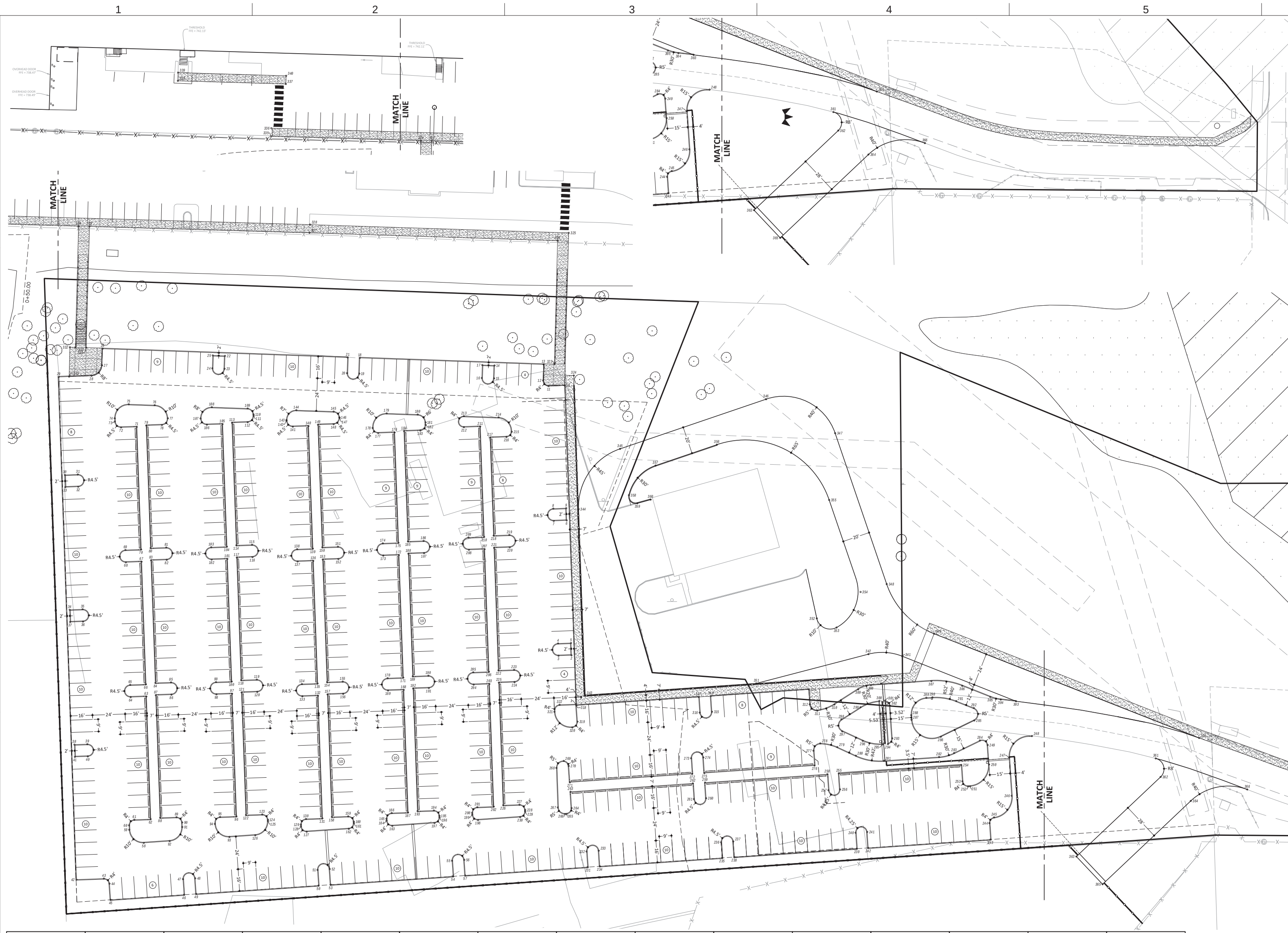
Catalent Pharma Solutions
South Parking Lot Project
Bloomington, IN
47402

MARK	DATE	DESCRIPTION
REVISION BLOCK		

PROJECT NO: 2021112
DATE: 01.20.2022
DRAWN BY: DLN
CHK'D BY: WSR

SHEET TITLE
SITE UTILITY PROFILES

C602



LAYOUT POINTS		
POINT #	NORTHING	EASTING
1	1421356.080	3106420.016
2	1421391.987	3106416.741
3	1421391.650	3106407.247
4	1421400.644	3106406.928
5	1421400.981	3106416.422
6	1421490.925	3106413.233
7	1421490.588	3106403.739
8	1421499.582	3106403.420
9	1421499.919	3106412.914
10	1421589.933	3106411.724
11	1421589.518	3106400.025
12	1421593.658	3106395.886
13	1421605.356	3106396.302
14	1421604.637	3106360.254
15	1421595.143	3106359.916
16	1421595.463	3106350.922
17	1421604.957	3106351.260
18	1421610.154	3106261.388
19	1421598.661	3106260.979
20	1421598.981	3106251.984
21	1421610.474	3106252.393
22	1421611.674	3106162.379
23	1421602.180	3106162.041
24	1421602.500	3106153.047

LAYOUT POINTS		
POINT #	NORTHING	EASTING
25	1421611.994	3106153.385
26	1421616.871	3106072.507
27	1421604.751	3106072.076
28	1421597.040	3106064.364
29	1421596.186	3106040.269
30	1421524.302	3106044.819
31	1421524.638	3106054.313
32	1421515.644	3106054.632
33	1421515.307	3106045.138
34	1421425.364	3106048.327
35	1421425.701	3106057.821
36	1421416.706	3106058.140
37	1421416.370	3106048.646
38	1421326.426	3106051.835
39	1421326.763	3106061.330
40	1421317.768	3106061.648
41	1421317.432	3106052.154
42	1421227.417	3106053.345
43	1421228.131	3106073.466
44	1421224.407	3106077.598
45	1421212.568	3106078.408
46	1421216.255	3106132.282
47	1421227.728	3106131.497
48	1421228.343	3106140.476
49	1421216.870	3106141.261
50	1421223.015	3106231.051

LAYOUT POINTS		
POINT #	NORTHING	EASTING
51	1421234.488	3106230.266
52	1421235.102	3106239.245
53	1421223.608	3106240.032
54	1421229.772	3106329.820
55	1421241.247	3106329.035
56	1421241.862	3106338.014
57	1421230.389	3106338.799
58	1421254.328	3106102.751
59	1421263.950	3106092.075
60	1421267.175	3106091.960
61	1421271.314	3106095.816
62	1421271.739	3106107.809
63	1421361.683	3106104.619
64	1421361.275	3106093.126
65	1421370.269	3106092.808
66	1421370.677	3106104.300
67	1421460.620	3106101.111
68	1421460.213	3106089.618
69	1421469.207	3106089.299
70	1421469.615	3106100.792
71	1421559.558	3106097.603
72	1421559.151	3106086.110
73	1421563.488	3106081.453
74	1421565.815	3106081.371
75	1421576.163	3106091.720
76	1421575.486	3106110.756

LAYOUT POINTS		
POINT #	NORTHING	EASTING
77	1421565.846	3106120.394
78	1421560.970	3106116.064
79	1421560.563	3106104.571
80	1421470.619	3106107.761
81	1421471.027	3106119.254
82	1421462.032	3106119.572
83	1421461.625	3106108.080
84	1421371.681	3106111.269
85	1421372.089	3106122.762
86	1421363.094	3106123.081
87	1421362.687	3106111.588
88	1421272.743	3106114.777
89	1421273.169	3106126.770
90	1421269.313	3106130.909
91	1421265.957	3106131.028
92	1421255.626	3106121.717
93	1421258.631	3106165.638
94	1421268.254	3106154.962
95	1421273.339	3106158.784
96	1421273.764	3106170.776
97	1421363.708	3106167.587
98	1421363.300	3106156.094
99	1421372.295	3106155.775
100	1421372.702	3106167.268
101	1421462.646	3106164.079
102	1421462.238	3106152.586

LAYOUT POINTS		
POINT #	NORTHING	EASTING
103	1421471.233	3106152.267
104	1421471.640	3106163.760
105	1421561.584	3106160.570
106	1421561.176	3106149.078
107	1421565.716	3106144.414
108	1421573.994	3106152.693
109	1421573.059	3106178.995
110	1421568.721	3106183.332
111	1421567.652	3106183.370
112	1421562.995	3106179.032
113	1421562.588	3106167.539
114	1421472.644	3106170.729
115	1421473.052	3106182.221
116	1421464.058	3106182.540
117	1421463.650	3106171.047
118	1421373.707	3106174.237
119	1421374.114	3106185.730
120	1421365.120	3106186.049
121	1421364.712	3106174.556
122	1421274.769	3106177.745
123	1421275.194	3106189.738
124	1421271.338	3106193.877
125	1421270.260	3106193.915
126	1421259.929	3106184.604
127	1421262.512	3106222.339
128	1421266.361	3106218.068

LAYOUT POINTS		
POINT #	NORTHING	EASTING
129	1421267.758	3106218.019
130	1421271.897	3106221.875
131	1421272.322	3106233.867
132	1421362.265	3106230.678
133	1421361.858	3106219.185
134	1421370.852	3106218.866
135	1421371.260	3106230.359
136	1421461.203	3106227.169
137	1421460.796	3106215.677
138	1421469.790	3106215.358
139	1421470.198	3106226.851
140	1421560.141	3106223.661
141	1421559.734	3106212.168
142	1421564.071	3106207.512
143	1421564.544	3106207.495
144	1421571.788	3106214.739
145	1421570.814	3106242.114
146	1421566.477	3106246.451
147	1421566.210	3106246.460
148	1421561.553	3106242.123
149	1421561.145	3106230.630
150	1421471.202	3106233.819
151	1421471.609	3106245.312
152	1421462.615	3106245.631
153	1421462.208	3106234.138
154	1421372.264	3106237.328

LAYOUT POINTS		
POINT #	NORTHING	EASTING
155	1421372.672	3106248.820
156	1421363.677	3106249.139
157	1421363.270	3106237.647
158	1421273.326	3106240.836
159	1421273.752	3106252.828
160	1421269.896	3106256.968
161	1421268.762	3106257.008
162	1421264.630	3106253.283
163	1421266.816	3106285.226
164	1421270.665	3106280.955
165	1421272.061	3106280.906
166	1421276.201	3106284.762
167	1421276.626	3106296.754
168	1421366.569	3106293.565
169	1421366.162	3106282.072
170	1421375.156	3106281.753
171	1421375.564	3106293.246
172	1421465.507	3106290.056
173	1421465.100	3106278.564
174	1421474.094	3106278.245
175	1421474.502	3106289.737
176	1421555.451	3106286.867
177	1421555.026	3106274.878
178	1421558.748	3106270.746
179	1421569.429	3106281.077
180	1421568.619	3106303.837

LAYOUT POINTS		
POINT #	NORTHING	EASTING
181	1421562.836	3106309.620
182	1421561.019	3106309.684
183	1421556.880	3106305.828
184	1421556.455	3106293.836
185	1421475.506	3106296.706
186	1421475.913	3106308.199
187	1421466.919	3106308.518
188	1421466.511	3106297.025
189	1421376.568	3106300.215
190	1421376.976	3106311.707
191	1421367.981	3106312.026
192	1421367.574	3106300.534
193	1421277.630	3106303.723
194	1421278.055	3106315.715
195	1421274.200	3106319.855
196	1421273.066	3106319.895
197	1421268.934	3106316.170
198	1421271.120	3106348.113
199	1421274.969	3106343.842
200	1421276.365	3106343.793
201	1421280.505	3106347.649
202	1421280.930	3106359.641
203	1421370.873	3106356.452
204	1421370.466	3106344.959
205	1421379.460	3106344.640
206	1421379.868	3106356.133

LAYOUT POINTS		
POINT #	NORTHING	EASTING
207	1421469.811	3106352.943
208	1421469.404	3106341.451
209	1421478.398	3106341.132
210	1421478.805	3106352.624
211	1421559.755	3106349.754
212	1421559.329	3106337.762
213	1421567.413	3106337.759
214	1421566.507	3106363.233
215	1421555.968	3106372.862
216	1421552.189	3106369.010
217	1421551.765	3106357.042
218	1421479.810	3106359.593
219	1421480.217	3106371.086
220	1421471.223	3106371.405
221	1421470.815	3106359.912
222	1421380.872	3106363.102
223	1421381.279	3106374.594
224	1421372.285	3106374.913
225	1421371.878	3106363.421
226	1421281.934	3106366.610
227	1421282.359	3106378.602
228	1421278.504	3106382.742
229	1421277.370	3106382.782
230	1421273.238	3106379.057
231	1421236.534	3106428.589
232	1421248.007	3106427.804

LAYOUT POINTS		
POINT #	NORTHING	EASTING
233	1421248.622	3106436.783
234	1421237.148	3106437.568
235	1421243.294	3106527.358
236	1421254.767	3106526.573
237	1421255.381	3106535.552
238	1421243.908	3106536.337
239	1421250.053	3106626.127
240	1421261.776	3106625.325
241	1421262.356	3106633.805
242	1421250.634	3106634.607
243	1421256.779	3106724.397
244	1421268.799	3106723.574
245	1421273.033	3106727.009
246	1421288.912	3106739.890
247	1421316.833	3106737.979
248	1421332.737	3106754.841
249	1421326.135	3106722.307
250	1421311.831	3106723.286
251	1421295.842	3106709.345
252	1421295.747	3106707.950
253	1421299.464	3106703.686
254	1421311.436	3106702.867
255	1421305.291	3106613.077
256	1421293.568	3106613.879
257	1421292.988	3106605.399
258	1421304.711	3106604.597

LAYOUT POINTS		
POINT #	NORTHING	EASTING
259	1421298.566	3106514.807
260	1421287.092	3106515.592
261	1421286.478	3106506.613
262	1421297.951	3106505.828
263	1421291.806	3106416.038
264	1421279.834	3106416.857
265	1421275.570	3106413.139
266	1421275.494	3106412.031
267	1421280.305	3106406.693
268	1421309.303	3106405.665
269	1421314.460	3106411.107
270	1421310.749	3106414.741
271	1421298.790	3106415.560
272	1421304.935	3106505.350
273	1421316.408	3106504.564
274	1421317.022	3106513.543
275	1421305.549	3106514.329
276	1421311.080	3106595.140
277	1421321.995	3106594.393
278	1421327.337	3106599.382
279	1421324.590	3106611.913
280	1421318.307	3106625.569
281	1421314.560	3106645.992
282	1421317.340	3106686.613
283	1421320.283	3106697.668
284	1421329.461	3106716.570

LAYOUT POINTS		
POINT #	NORTHING	EASTING
285	1421344.140	3106712.461
286	1421332.190	3106687.848
287	1421344.659	3106666.331
288	1421348.011	3106666.102
289	1421360.803	3106677.254
290	1421361.110	3106681.750
291	1421358.399	3106699.194
292	1421353.288	3106712.116
293	1421331.024	3106652.229
294	1421326.834	3106649.047
295	1421326.523	3106644.976
296	1421329.209	3106630.585
297	1421336.141	3106615.518
298	1421344.898	3106614.919
299	1421353.818	3106628.900
300	1421358.446	3106642.820
301	1421358.720	3106646.826
302	1421354.968	3106650.590
303	1421358.250	3106743.070
304	1421359.505	3106731.871
305	1421361.422	3106724.177
306	1421369.558	3106703.608
307	1421373.082	3106680.930
308	1421370.046	3106636.569
309	1421366.954	3106627.178
310	1421355.850	3106609.774

LAYOUT POINTS		
POINT #	NORTHING	EASTING
311	1421351.356	3106597.228
312	1421355.979	3106591.641
313	1421366.920	3106590.892
314	1421362.004	3106519.060
315	1421350.531	3106519.845
316	1421349.916	3106510.866
317	1421361.390	3106510.081
318	1421355.244	3106420.291
319	1421343.272	3106421.111
320	1421339.009	3106417.393
321	1421350.529	3106404.203
322	1421355.655	3106408.023
323	1421605.644	3106404.141
324	1421597.262	3106418.411
325	1421701.898	3106414.698
326	1421696.165	3106406.543
327	1421701.945	3106224.437
328	1421707.936	3106224.820
329	1421706.584	3106062.869
330	1421617.692	3106060.510
331	1421596.458	3106047.943
332	1421618.012	3106048.514
333	1421617.906	3106052.513
334	1421706.794	3106054.871
335	1421709.950	3105944.917
336	1421715.948	3105945.088

LAYOUT POINTS		
POINT #	NORTHING	EASTING
337	1421748.368	3105955.777
338	1421750.701	3105876.501
339	1421756.706	3105876.641
340	1421754.365	3105955.953
341	1421391.284	3106659.560
342	1421392.792	3106634.748
343	1421362.705	3106426.785
344	1421499.232	3106421.944
345	1421543.431	3106452.428
346	1421579.861	3106559.556
347	1421554.931	3106610.283
348	1421444.212	3106648.136
349	1421407.782	3106682.957
351	1421371.301	3106552.377
352	1421419.020	3106596.845
353	1421412.360	3106611.342
354	1421438.431	3106628.976
355	1421505.950	3106605.893
356	1421546.462	3106523.461
357	1421531.166	3106478.480
358	1421509.448	3106458.894
359	1421503.514	3106465.096
360	1421506.196	3106474.832
361	1421316.278	3106845.666
362	1421302.699	3106849.225
363	1421244.322	3106787.406

LAYOUT POINTS		
POINT #	NORTHING	EASTING
364	1421285.105	3106871.376
365	1421223.964	3106806.630
366	1421293.477	3106912.882

GENERAL NOTES

A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENCY, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR FENCELINE, UNLESS OTHERWISE NOTED. CURB RETURN RADII ARE TO FACE OF CURB. COORDINATE DIMENSIONS WITH ARCHITECTURAL. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

C. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

D. SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

E. ALL STREET CUTS FOR UTILITIES AND OTHER IMPROVEMENTS SHALL BE REPAIRED TO MATCH EXISTING PAVEMENT SECTION OR BETTER.

PLAN NOTES

LEGEND

- LIMITS OF NEW ASPHALT SIDEPATH
- LIMITS OF NEW 4" THICK CONCRETE PAVING
- PAVEMENT STRIPING 2' O.C.
- LIMITS OF ASPHALT PAVEMENT PATCH

SCALE: 1" = 30'

NORTH

MUSSETT NICHOLAS + ASSOCIATES
Engineers + Architects
502 S. WEST STREET
INDIANAPOLIS, INDIANA
317.631.9241

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RALEIGH, NORTH CAROLINA 27609
919.703.4028

Bledsoe Riggert Cooper James
BRCJ
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1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

BRCJ Project No: 10563.2

Certified By

Catalent Pharma Solutions
South Parking Lot Project
Bloomington, IN
47402

MARK	DATE	DESCRIPTION

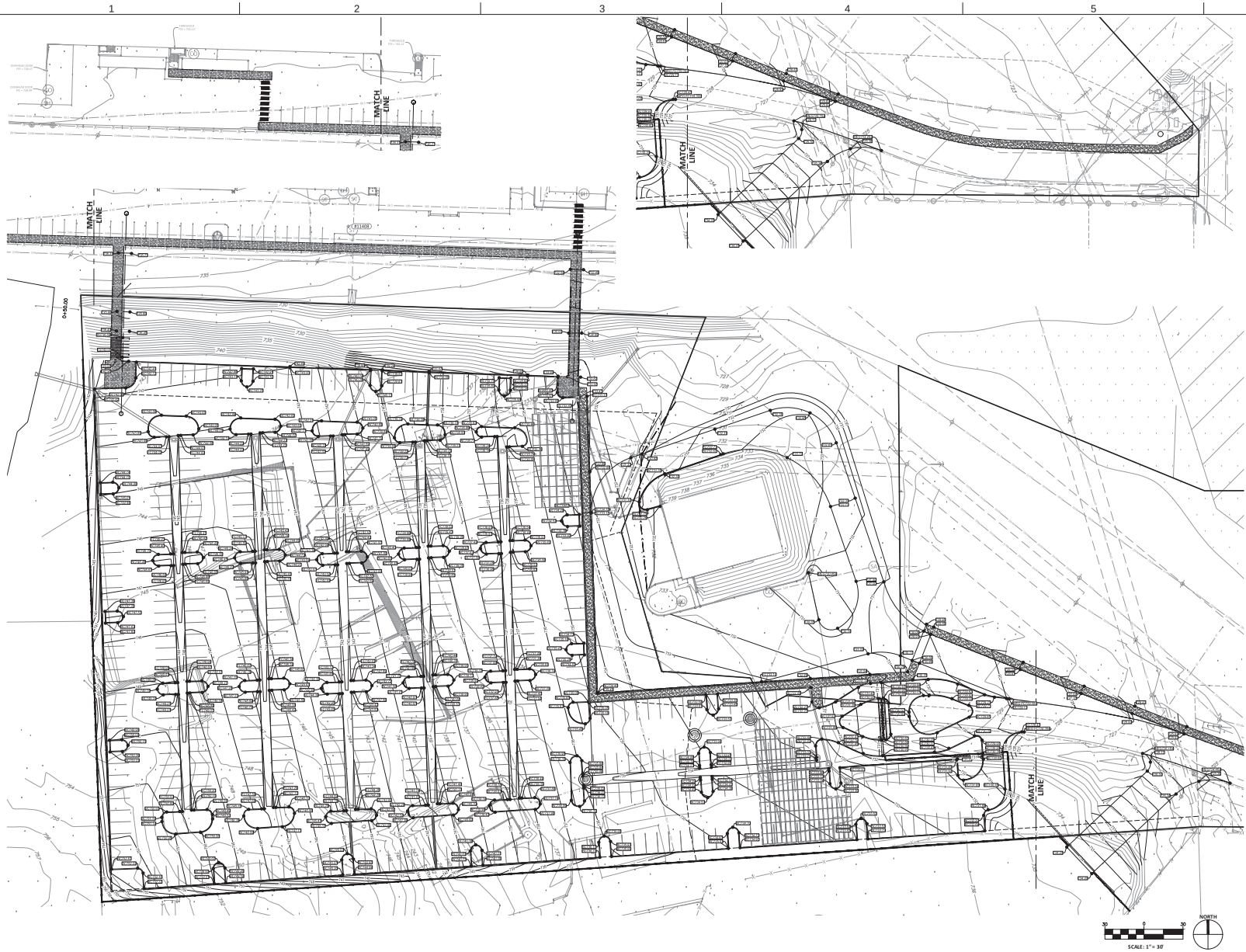
REVISION BLOCK

PROJECT NO: 2021112
DATE: 01.20.2022
DRAWN BY: DLN
CHK'D BY: WSR

SHEET TITLE
SITE IMPROVEMENT PLAN

C401

30 x 42 Drawing: S:\jobs\10501-10600\10563.2 CATALENT SOUTH PARKING LOT\Draw\Civil Design Base.dwg was plotted by: dineubec on Jan 20, 2022 at 9:14am



GENERAL NOTES

A. GRADE ALL AREAS TO THE FINISH GRADES SHOWN.

B. CONTRACTOR TO VERIFY FIELD CONDITIONS WITH RESPECT TO THE PROPOSED GRADING PLANS AND NOTIFY ENGINEER OF ANY AND ALL DISCREPANCIES PRIOR TO BEGINNING WORK.

C. INSTALL AND MAINTAIN EROSION CONTROL DEVICES AS REQUIRED AND WHERE NECESSARY TO CONTROL SEDIMENT.

D. CONTRACTOR SHALL PREVENT SURFACE WATER-AND-GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND FROM FLOODING PROJECT SITE AND SURROUNDING AREAS. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT AND DAMAGE BY RAIN OR WATER ACCUMULATION. THIS WILL REQUIRE SUPPLEMENTAL GRADING ABOVE AND BEYOND THAT SHOWN.

E. CONTRACTOR SHALL ADJUST ALL CASTINGS TO FINISHED GRADE.

F. CONTRACTOR SHALL ESTABLISH FINISH GRADES TO ENSURE POSITIVE DRAINAGE WITH NO PONDING.

G. LONGITUDINAL SIDEWALK SLOPE SHALL NOT EXCEED 5%, UNLESS NOTED OTHERWISE. TRANSVERSE SIDEWALK SLOPE SHALL NOT EXCEED 2%.

H. SPOT GRADES GIVEN AT THE FACE OF CURB INDICATE PAVEMENT EDGE/CURB INTERFACE (FLOW LINE) ELEVATION, UNLESS NOTED OTHERWISE. BOTTOM OF WALL ELEVATIONS INDICATE WHERE FINISH GRADE AND WALL MEET.

I. ALL SLOPES 3:1 OR GREATER TO BE COVERED WITH NORTH AMERICAN GREEN SE150N EROSION CONTROL BLANKET OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

PLAN NOTES (1)

1. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

LEGEND

	PROPOSED CONTOURS
	EXISTING CONTOURS
731.50	SPOT ELEVATION
MEG	MATCH EXISTING GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISH GRADE ELEVATION
TS	TOP OF STAIR - ELEVATION IS EQUAL ACROSS WIDTH
BS	BOTTOM OF STAIR - ELEVATION IS EQUAL ACROSS WIDTH
BC	BOTTOM OF CURB WHERE IT MEETS PAVEMENT. FOR STANDING AND CHAIR BACK CURBS, TOP OF CURB IS 6" ABOVE THIS ELEVATION UNLESS NOTED OTHERWISE. FOR ROLL CURBS, TOP OF CURB IS 3.5" ABOVE THIS ELEVATION, UNLESS NOTED OTHERWISE
FL	FLOW LINE
FC	FLUSH CURB - CURB IS IN FULLY DEPRESSED CONDITION
TC	TOP OF CURB - PROVIDED ONLY WHEN CURB IS IN A NONSTANDARD HEIGHT CONDITION.
TB	TOP OF BANK
	LIMITS OF ASPHALT PAVEMENT
	LIMITS OF CONCRETE PAVING

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC 8-1-26
IT IS AGAINST THE LAW TO EXCAVATE WITH OUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

MUSSETT NICHOLAS + ASSOCIATES
Engineers + Architects
502 S. WEST STREET
INDIANAPOLIS, INDIANA
317.631.9241
5974 SIX FORKS ROAD, SUITE B
RALEIGH, NORTH CAROLINA 27609
919.703.4028

BRCJ
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjin4.com

BRCJ Project No: 10563.2

Certified By

Catalent Pharma Solutions
South Parking Lot Project
Bloomington, IN
47402

MARK	DATE	DESCRIPTION
REVISION BLOCK		

PROJECT NO: 2021112
DATE: 01.20.2022
DRAWN BY: DLN
CHK'D BY: WSR

SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER
C501

RAMBØLL

ENVIRONMENT
& HEALTH

D R A F T

November 23, 2021

Via Electronic Mail

Mr. Mark Incledion
Global Director - Environment, Sustainability, Health & Safety
Catalent Pharma Solutions
Frankland Road, Blagrove
Swindon, Wiltshire, SN5 8RU, UK

RE: GEOTECHNICAL EVALUATION
PROPOSED PARKING LOT AREA
1600 SOUTH ROGERS STREET, BLOOMINGTON, IN

Mr. Incledion:

This letter report presents the findings of a geotechnical investigation and evaluation completed by Ramboll Americas Engineering Solutions, Inc. (Ramboll) in connection with the design of a proposed 200,000 square foot parking lot for the Catalent Pharma Solutions (Catalent) facility in Bloomington, Indiana. The proposed parking lot site is located to the south of the existing Catalent facility and to the west of South Rogers Street. The proposed parking lot will be constructed on a former industrial site and will be used for employee parking.

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SUBSURFACE INVESTIGATION

The subsurface investigation at the Catalent Bloomington, Indiana site was conducted between October 25 and November 4, 2021. The investigation consisted of 43 geotechnical soil borings drilled by GEOTILL, Inc. under contract with Ramboll, at the locations indicated on the boring layout on Figure 1. A geologist from Ramboll was present on-site to observe and document the drilling activities. The borings were drilled with a Diedrich D-50 Turbo truck-mounted drill rig.

As shown in Figure 1, proposed soil borings B-07, B-13, B-37 and B-44 could not be installed as planned. In the case of B-07 and B-13, Ramboll encountered steel reinforced concrete (rebar) that could not be penetrated with available drilling equipment, whereas the B-37 and B-44 boring locations could not be accessed with the drill rig. Additionally, a total of four soil borings were installed at location B-42 (B-42, B-42A, B-42B and B-42C); these additional soil borings were installed to evaluate environmental conditions in the vicinity of the site's diesel fueling area, but are discussed herein for completeness.

The soil borings were drilled utilizing 3 ¼-inch inside diameter hollow stem augers in accordance with ASTM D1452 *Standard Practice for Soil Investigation and Sampling by Auger Borings*. The borings were sampled continuously varying from ground surface and 1-foot below ground surface (bgs) to depths between 7 and 11 feet bgs with a split spoon sampler. Split spoon sampling was conducted using an automatic hammer in accordance with ASTM D1586 *Standard Method for Penetration Test and Split Barrel Sampling of Soils*.

SUBSURFACE CONDITIONS

As previously mentioned, competent, reinforced concrete slabs were encountered at two soil boring locations (B-07 and B-13) which were abandoned as a result of these obstructions. Additional concrete slabs of significant thickness were also encountered near ground surface at B-03 (7 feet thick) and B-08 (9.5 feet thick). All four of these boring locations are situated in the same general area in the north-central portion of the site, and may represent a notable consideration depending on the cut and fill plans for the contemplated construction project.

Overall, the subsurface conditions encountered at the site can generally be characterized into three soil strata consisting of fill, clays, and weathered limestone. These strata are described in further detail below. Various layers of silt and sand lenses were found within the strata with thicknesses varying from 3 inches to 1 foot in thickness. The boring logs are presented in Attachment 1.

- *Fill Stratum* – Fill was encountered in 36 of the 43 borings from the ground surface to depths ranging between 2 and 9 feet bgs. The fill layers consisted of a mix of gravels, sands, silts and clays ranging in density from loose to very dense with unfactored blow counts from 3 blows per foot (bpf) to 50 blows per inch. Crushed concrete mixed with fill was found in borings B-02, B-30, B-31, and B-42.
- *Clay Stratum* – The clay stratum was encountered below the fill layer in 36 of the 43 borings and at the ground surface where fill was not encountered. The clay stratum ranged in depths from 7 feet bgs to termination of borings at 11 feet bgs. The clay layer consisted of a mix of lean and fat clays with various amounts of silt, sand, and gravel as well as sand and silt lenses interlayered within the clay stratum. The clay stratum ranged in densities from soft to hard with blow counts ranging from Weight of Hammer (WOH) to 50 blows over 3 inches.
- *Weathered Limestone* – The weathered limestone stratum was encountered below the clay soil stratum at depths ranging from 7 to 11 feet bgs and continued until termination of the borings in 10 of the 43 borings. The weathered limestone consisted of poorly graded sandy gravel with crushed white limestone fragments. The weathered limestone stratum was very dense with blow counts ranging between 50 blows over 3 inches to 50 blows over 5 inches.

Groundwater was observed within seven of the 43 boring locations at the time of drilling. The depths of the observed groundwater are summarized in Table 1 below.

Table 1: Observed Ground Water Depths

Boring	Depth BGS
B-21	4.0 ft
B-22	4.0 ft
B-23	10.75 ft
B-26	6.5 ft
B-32	6.35 ft
B-33	4.2 ft
B-36	5.9 ft
B-40	4.2 ft

GEOTECHNICAL LABORATORY TESTING

Following a review of the soil boring logs, a laboratory testing program was developed by Ramboll to analyze select soil samples to assess site-specific geotechnical properties of the fill material and the native soils. The laboratory testing program, performed by GEOTILL, Inc., included the evaluation of

natural moisture content, Atterberg limits, and grain size distribution. A summary of the laboratory results is provided below. Detailed test results are provided in Exhibit A.

Natural Moisture Content

Natural moisture content tests were performed on soil samples taken of the fill and clay strata. The tests were completed in accordance with ASTM D2216 *Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass*. For the fill stratum, the moisture content was 8%. For the clay stratum, the moisture contents ranged from 25% to 33% with an average of 27.5%.

Atterberg Limits

Atterberg Liquid and Plastic Limit testing was conducted on two of the clay stratum samples. Atterberg limits were analyzed in accordance with ASTM D4318 *Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*.

Table 2: Atterberg Limits Results

Boring / Sample	Depth (ft)	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
B-10 / SP-2,3,4	3 to 9	40	20	20
B-20 / SP-2	3 to 5	42	20	22

Particle Size Analysis

Particle size analysis was performed on two soil samples taken from the clay strata and one from the fill strata in accordance with ASTM D4222 *Standard Test Method for Particle – Size Analysis of Soil*. The results of the testing are shown below.

Table 3: Particle Size Analysis Results

Boring / Sample	Depth (ft)	Percent Gravel	Percent Sand	Percent Silt	Percent Clay
B-10 / SP-2,3,4	3 to 9	1.4	13.2	41.4	44.1
B-20 / SP-2	3 to 5	1.1	12.4	36.6	48.6
B-28 / SP-1	1 to 3	18.8	56.6	12.1	12.4

SUMMARY OF FINDINGS

Earthwork

Based on the subsurface conditions observed, the earthwork for the parking area should commence with the complete removal of all topsoil, fill material and clay strata as necessary to attain proposed finished subgrade elevations. Areas which are unsuitable should be over-excavated to a suitable bearing stratum and backfilled with compacted structural fill. Based on the subsurface conditions observed and the anticipated earthwork, groundwater is not anticipated to be encountered. If groundwater is encountered, the excavations should be dewatered to a minimum depth of two feet below the proposed top of subgrade.

If existing building footings or underground utilities are in the vicinity of the earthwork performed for the proposed parking area, they should be protected by underpinning and/or a sheeting and shoring system designed by an engineer licensed in the State of Indiana and installed prior to excavation activity. If an excavation support system is required to protect existing building footings or underground utilities, a vibration monitoring program should be developed and implemented during

the installation of the support system. It is recommended that a geotechnical engineer be consulted to evaluate the proposed methods for protecting utilities and structures. Conventional open cut methods and/or trench boxes may be used for construction and installation of utilities.

Foundation and underground utility excavations should be protected from freezing conditions and maintained free of ponded water before concrete placement. The pavement sub-grade soils should be proof-rolled a minimum of six passes with a roller having a minimum weight of 20 tons.

Structural Fill and Backfill Criteria

Crushed stone placed as subbase below the pavement should meet the requirements of Indiana Department of Transportation (IDOT) dense graded aggregate base (IDOT 904.03 No. 73). Imported structural fill placed within the footprint of the proposed parking lot should consist of predominately granular soils, free from organic matter, ice, debris, or other deleterious material.

It is anticipated the on-site soils may be used as non-structural backfill in areas to be designated as grass-covered areas, provided on-site soils do not contain substantial amounts of organics or miscellaneous debris. Reuse of the on-site materials will be contingent upon gradation test results, proper placement, and compaction, including moisture control.

The Atterberg limits of the clay stratum tested for the site assessment had liquid limits of 40 and 42 and plasticity indices of 20 and 22. Based on the samples tested for index properties, the site soils are considered marginal for expansion potential.

On-site soils placed as non-structural backfill should be placed in horizontal lifts not to exceed 10 inches of loose lift thickness and compacted to a minimum of 90% of the maximum dry density as determined by *ASTM Method D1557 "Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort"*. Imported fill, backfill, and base course material beneath the pavement should be placed in horizontal lifts not to exceed 8 inches loose thickness, and should be compacted to 95% of maximum dry density according to the Modified Proctor Test.

Pavements

Site grading for the proposed pavement area should be performed in accordance with the construction drawings for the project, and site preparation, including proof-rolling, should be performed as described above. Organic and soft unsuitable clay soils should be removed, and the remaining soils should be compacted to at least 95 percent maximum laboratory dry density in accordance with ASTM D1557 (Modified Proctor) to a depth of at least 12 inches below the final proposed bottom of the graded aggregate base. If existing concrete slabs or foundations are encountered, they should be removed as necessary to place the aggregate base material. It is recommended that all aggregate base material be underlain with a woven geotextile or geogrid with the minimum strength that is equal to or greater than Mirafi 600X. If at any time soft or pumping soils are encountered within the pavement footprint, it is recommended that those soils be over excavated and replaced with an IDOT Coarse Aggregate 904.03 No. 8 or 9 underlain by a triaxial geogrid.

The dense graded aggregate base (IDOT 904.03 No. 73) should be compacted to at least 98% of its Modified Proctor Maximum Dry Density as determined by ASTM D1557. The hot-mix asphalt concrete should be compacted to at least 98% and no more than 102% of its maximum mix density, as determined by the Gyratory Mix Design procedure. All subgrade, base and pavement operations, materials and construction should meet the minimum requirements of the IDOT "Standard Specifications", 2020 Version.

Subgrade Modulus

Based on the boring results the recommended subgrade modulus for the top one foot of the loose to very dense fill stratum that covers the majority of the site could range from 100 pounds/cubic inch to 200 pounds/cubic inch. The subgrade modulus provided in this report is based on and assumes that the site will be proof-rolled as recommended.

California Bearing Ratio

Based on the soil boring results, the recommended California Bearing Ratio (CBR) for the top one foot of the loose to very dense fill stratum that covers the majority of the site could range from 5 to 10. The CBR provided in this report is based on and assumes that the site will be proof-rolled as recommended.

LIMITATIONS

This geotechnical engineering letter report has been prepared by Ramboll for use in the design of the proposed parking lot area for the Catalent Pharma Solutions facility. The recommendations in this report are based on the information obtained from the subsurface investigation and our understanding of the proposed construction. Changes to the recommendations may be warranted if actual subsurface conditions vary from those anticipated based on the soil borings and geotechnical laboratory analyses, or if the proposed construction activities vary from those discussed in this report. In addition, construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions.

CLOSING

Ramboll appreciates the opportunity to be of service to Catalent. If you have any questions regarding this letter report or require further assistance, please do not hesitate to contact us at your convenience.

Yours sincerely,

[DRAFT]

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DTF/FVL:ags
1690023695

Attachments:
Figure 1
Attachment 1 - Soil Boring Logs
Exhibit A –Laboratory Test Results

FIGURE 1
GEOTECHNICAL SOIL BORING LOCATION PLAN

PROPERTY BOUNDARY

PARCEL BOUNDARY (APPROXIMATE)

ABANDONED TANK

B16 SOIL BORING

B44 SOIL BORING NOT COMPLETED**

Note:
**Soil borings not completed due to the presence of shallow concrete with rebar (2 to 6 inches below grade in B-07 and B-13) or surface obstructions/lack of drill rig accessibility (B-37 and B-44).

0 100 Feet

GEOTECHNICAL SOIL BORING LOCATION PLAN

FORMER IRVING MATERIALS, INC.
1600 S ROGERS STREET
BLOOMINGTON, INDIANA

FIGURE 01

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

ATTACHMENT 1
BORING LOGS

RAMBOLL

SOIL BORING LOG

BORING ID: B-01
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/1/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/1/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	2.25	23"	30 / 27 / 37 / 35	64	**SM:** Silty sand with 20% gravel, well graded fine to coarse, moist, loose fill. Gray in color, crushed concrete with fibrous debris.	Fill		
	2.25	3				**SM**: Same fill as above but dark green, mottled gray to black with wood debris	Wood/Fill		
	3	5	14"	12 / 50/5"	N/A	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, moist to wet, loose fill material. Pale brown to greenish gray with wood fragments	Fill		
	5	7	6"	7 / 5 / 6 / 9	11	**SM:** Same fill as 3-5' increment, slight odor with no PID hits	Fill		
	7	7.5	24"	6 / 6 / 2 / 2	8	**SM:** Same fill as increments 3-5' and 5-7', slight odor	Fill		
	7.5	8				**MH:** Clayey silt with trace fine sand, moist to wet, low plasticity, soft. Yellow white to tan in color.	Silt		
	8	9				**CH:** Clay, moist to wet, medium to high plasticity, soft. Dark gray brown, mottled light gray.	Clay		
	9	11	13"	2 /1 / 1/ 1	2	**OH:** Clay, moist to wet, medium to high plasticity, soft. Very soft, dark brown mottled light gray, very slight odor with weathered black nodules.	Clay		

NOTES: PID= 0.0-0.1ppm; borehole collapsed to 2.0' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-02
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/28/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/28/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	20.5"	9 / 26 / 46 / 50/3"	72	**SM:** Silty sand with 10% gravel, well graded, fine to coarse, loose fill. Light gray to light brown. 1-2' dry. 2-3' moist to wet.	Fill		
	3	5	8.5'	41 / 50/1"	N/A	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, loose fill. 3-4.5' moist, gray to brown. 4.5-5' dry, gray to white, crushed concrete.	Fill		
	5	7	7.5'	50/4"	N/A	**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry. Tan to light gray white, crushed concrete.	Concrete		

NOTES: PID= 0.0-0.1ppm; borehole collapsed to 3.0' bgs, dry, no samples taken, refusal at 7' in concrete

RAMBOLL

SOIL BORING LOG

BORING ID: B-03
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/25/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/25/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	6	N/A	N/A	N/A	Concrete	Concrete		
	6	8	24'	21 / 18 / 22 / 21	40	6-6.75' Concrete 6.75-8': **CL,** silty clay with 5% fine sand, dry to moist, non-plastic, stiff. 6.75-6' light gray brown. 7-8' light brown gray.	Clay		
	8	10	24'	2 / 2 / 2 / 2	4	**CH:** Clay, dry to moist, medium to high plasticity, soft. 8-8.5' blackish gray with brown mottles. 8.5-10' brown.	Clay		

NOTES: Dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-04
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/3/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/3/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	0.5	24"	6 / 8 / 9 / 5	17	**SW:** Silty sand, fine to coarse, dry to moist, loose. Brown in color.	Sand		
	0.5	1				**CL:** Clay with 5% fine sand and few gravel, dry to moist, medium plasticity, firm. Dark brown with red brown mottles	Clay		
	1	1.75				**GM:** Sandy gravel with 10% fines, well graded, dry, loose. Crushed concrete and fill, tan white in color.	Fill		
	1.75	2				**CH:** Clay, dry to moist, high plasticity, soft. Light grey to brown with dark brown mottles	Clay		
	2	4	0	4 / 2 / 3 / 5	5	No recovery, rock in shoe	N/A		
	4	5.75	24'	2 / 3 / 3 / 5	6	**CH:** Clay, dry to moist, high plasticity, soft to firm. Red brown with light brown mottles and black nodules. Tree root @ 4.5'	Clay		
	5.75	6				**CH:** Clay, dry to moist, medium to high plasticity, soft. Brown with light gray mottles.	Clay		
	6	6.75	24"	3 / 2 / 2 / 4	4	**CH:** Clay, dry to moist, medium to high plasticity, firm.	Clay		
	6.75	7.25				**CH:** Clay, moist, medium plasticity, very soft.	Clay		
	7.25	8				**CL:** Clay with 15% gravel, dry to moist, high plasticity, firm	Clay		
	8	9.5	24"	3 / 3 / 4 / 6	7	**CH:** Clay, dry to moist, high plasticity, soft to firm. Brown with grey mottles.	Clay		
	9.5	9.75				**CH:** same as 8-9.5' but moist to wet	Clay		
	9.75	10				**CL:** same as 8-9.5' but with mixed fine gravel and fine sand	Clay		

NOTES: Dry, PID Readings: 0-2' = 0.2, 2-4' = N/A, 4-6' = 0.3, 6-8' = 0.1, 8-10'= 0.1, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-05
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/3/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/3/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	0.5	19.5"	7 / 5 / 6 / 5	11	**SM:** Silty sand with 15% gravel, fine to coarse, dry, loose. Fill/topsoil with grass and roots. Tan to gray brown.	Fill/Topsoil		
	0.5	2				**CL:** Clay with fine sand and trace gravel, dry, non-plastic, soft. Brown with orange brown and light gray mottles.	Clay		
	2	4	10"	WOH / WOH / 4 / 4	N/A	**CL:** same as 0.5-2' but without mottles and no gravel	Clay		
	4	5	24'	6 / 5 / 4 / 4	9	**CL:** Clay, dry to moist, non-plastic to low plasticity, soft to firm. Brown with orange brown and light gay mottles.	Clay		
	5	6				**CL:** Clay with 15% gravel, dry to moist, medium plasticity, firm to stiff. Brown with orange brown and light gray mottles.	Clay		
	6	6.5	24"	4 / 3 / 5 /7	8	**CL:** Clay with 5% fine to coarse sand, dry to moist, low plasticity, soft. Brown with light brown and orange brown mottles and black nodules.	Clay		
	6.5	8				**CL:** Clay with 5% fine to coarse sand, dry to moist, medium to high plasticity, firm. Brown with light brown and orange brown mottles and black nodules.	Clay		
	8	9.5	24"	2 / 50/4"	N/A	**CH:** Clay with trace fine to coarse sand and gravel, moist to wet, high plasticity, soft to firm. Brown with gray mottles and orange and black nodules.	Clay		
	9.5	9.75				**CL:** Sandy clay, moist to wet, very soft. Dark brown.	Clay		
	9.75	10				**SM:** Silty sand with 20% gravel, well graded, fine to coarse, moist, loose. Crushed limestone, tan to gray.	Weathered limestone		

NOTES: Water on rods at 6', borehole collapsed to 3.5', dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-06
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/1/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/1/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	2.5	20"	8 / 4 / 15 / 16	19	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, dry, loose. Brown in color.	Fill		
	2.5	3				**SM:** Silty sand with 15% gravel, well graded, fine to coarse, moist, loose. Black cinders and gray white crushed concrete.	Fill/ Concrete		
	3	3.5	14.5"	8 / 2 / 1 / 3	3	**CL:** Sandy clay with trace gravel, dry, non-plastic, soft. Brown in color.	Clay		
	3.5	4				**CL:** Sandy clay with trace gravel, moist, medium plasticity, soft. Brown gray in color.	Clay		
	4	4.5				**SW:** Sand with 5% gravel, well graded, fine to coarse, dry to moist, loose. Cinders, black in color.	Sand		
	4.5	5				**CL:** Clay with 10% fine to medium sand and trace gravel, moist, medium to high plasticity, soft. Light orange brown with light gray and black mottles.	Clay		
	5	5.25	24"	2 / 3 / 2 / 3	5	**CL:** Silty clay with 10% gravel, dry to moist, medium plasticity, soft. Brown in color.	Clay		
	5.25	5.75				**SM:** Fine sand with some clay/silt, poorly graded, moist, loose. Light yellow brown in color.	Sand		
	5.75	7				**ML:** Silt with 10% clay, 5-15% fine sand. Light yellow brown, 6.5-6.75' red brown in color.	Silt		
	7	7.5	NA	1 / 1 / 1 / 1	2	**CL:** Silty clay with 15% gravel, dry to moist, medium plasticity, soft. Brown with light yellow brown mottles.	Clay		
	7.5	9				**OH:** Clay, dry to moist, medium to high plasticity, soft. Brown red with gray brown mottles and black nodules.	Clay		
	9	11	NA	WOH / WOH / WOH / 4	NA	**OH:** same as 7-7.5' but with 10% gravel.	Clay		

NOTES: PID= 0.0-0.1ppm, borehole collapsed to 2.0' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-08
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/25/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/25/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	9.5	NA	NA	NA	Concrete	Concrete		

NOTES: Concrete to 9.5 ', dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-09
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/3/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St. Bloomington, IN	DATE COMPLETED:	11/3/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	9.5"	4 / 4 / 3 / 4	7	**SM:** Silty sand with 10% gravel, well graded, fine to coarse, dry to moist, loose. Brown gray to tan in color.	Fill		
	2	3.5	24"	2 / 3 / 4 / 5	7	**CL:** Clay with 5% fine to coarse sand, dry to moist, medium to high plasticity, soft to firm. Light brown with black nodules.	Clay		
	3.5	4				**CL:** Silty clay, moist to wet, low plasticity, soft. Light yellow brown with dark green mottles.	Clay		
	4	5.5	24"	2 / 2 / 1 / 3	3	**CH:** Clay, dry to moist, high plasticity, firm to stiff. Light brown with light yellow and light gray mottles.	Clay		
	5.5	5.75				**CL:** Clay, moist to wet, low to medium plasticity, soft. Brown gray with light brown mottles.	Clay		
	5.75	6				**CH:** Clay, moist to wet, high plasticity, soft. Light brown with light yellow and light gray mottles.	Clay		
6-8	6	8	24"	3 / 3 / 4 / 5	7	**CH:** Clay, dry to wet, high plasticity, soft. Light brown with light gray mottles and black nodules. 5-10% silt at 6.5' and 7.5' with lower plasticity.	Clay	1600	
	8	9	24"	WOH / 4 / 50/2"	N/A	**CH:** Clay, dry to moist, high plasticity, soft. Light brown with light gray mottles and black nodules.	Clay		
	9	9.75				**CH:** same as 8-9' but with light brown gray and light brown mottles.	Clay		
	9.75	10				**CL:** Sandy clay, with trace gravel, moist to wet, low to medium plasticity, very soft. Light gray brown with orange brown mottles.	Clay		
10-12	10	10.5	9"	50/4"	N/A	**CL:** Sandy clay, dry, medium to high plasticity , stiff. Light brown with 10% weathered limestone.	Clay	1622	
	10.5	10.75				**GM:** Sandy gravel, poorly graded, fine to coarse, dry, loose. Weathered white limestone.	Weathered limestone		

NOTES: No water in temporary well installed to 10.75' bgs, cave in depth 10', dry, refusal at 10.75'

PID readings: 0-2' = 0.3, 2-4' = 0.2, 4-6' = 0.2, 6-8' = 0.2, 8-10' = 0.3, 10-10.75' = 1.3

PAGE: 1 of 1

RAMBOLL

SOIL BORING LOG

BORING ID: B-10
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/3/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/3/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
1-3	1	3	10"	2 / 8 / 6 / 3	14	**SM**: Silty sand with 15% gravel, well graded, fine to coarse, dry, loose. Light gray to gray white fill.	Fill	1135	
	3	5	13.5"	5 / 3 / 4 / 5	7	**CH**: Clay, dry to moist, medium to high plasticity, soft. Brown with black nodules.	Clay		
	5	7	24"	3 / 4 / 5 / 7	9	**CL**: Clay with 15% gravel and 5% fine to coarse sand, dry to moist, medium to high plasticity, firm to stiff. Light brown with orange brown mottles and black nodules.	Clay		
	7	9	24"	3 / 3 / 3 / 50/1"	6	**CL**: Clay with 20% gravel and 5% fine to coarse sand, moist, high plasticity, soft. Light brown with orange brown mottles and black nodules.	Clay		
	9	9.75	12.5"	50/5"	N/A	**CH**: same as 7-9' but with no gravel.	Clay		
	9.75	11				**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Light gray to gray tan weathered limestone.	Weathered limestone		

NOTES: Water on rod at 8', collapsed to 4' bgs, dry

PID Readings: 1-3' = 0.5, 3-5' = 0.1, 5-7' = 0.1, 7-9' = 0.2, 9-11' = 0.3

RAMBOLL

SOIL BORING LOG

BORING ID: B-11
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	11"	18 / 15 / 16 / 7	31	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, dry, loose fill. Tan to brown white in color.	Fill		
	3	5	6"	4 / 8 / 6 / 10	14	**GW:** Sandy gravel with 10% fines, fine to medium, dry, loose. Light brown in color.	Fill		
	5	7	0"	5 / 6 / 7 / 4	13	No Recovery. Rock in shoe.	N/A		
	7	7.75	19.5"	5 / 4 / 2 / 2	6	**ML:** Clayey silt with 10% poorly graded fine sand and few gravel, moist, non-plastic, soft. Light brown in color.	Silt/Clay		
	7.75	8.5				**ML:** Silty clay with 5% fine sand, moist to wet, low plasticity, soft. Dark gray brown to light brown in color.	Silt/Clay		
	8.5	9				**CH:** Clay, dry to moist, high plasticity, soft. Brown red with light brown mottles and black nodules.	Clay		
	9	11	24"	WOH / 13 / 2 / 1	15	**CH:** Clay with trace gravel, dry to moist, medium to high plasticity, soft. Brown red with light brown mottles and black nodules.	Clay		

NOTES: PID= 0.0-0.2ppm, borehole collapsed to 7.6' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-12
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.5	16.5"	10 / 23 / 24 / 13	47	**GM:** Silty sand with 15% gravel, fine to coarse, dry to moist, loose. Brown Fill.	Fill		
	1.5	2				**CH:** Clay, dry to moist, medium to high plasticity, soft. Red brown with black and light brown mottles. Native soil used as fill.	Fill		
	2	3				**GM:** Silty sand with 20% gravel, fine to coarse, dry, loose. Tan fill.	Fill		
	3	5	7"	9 / 9 / 6 / 5	15	**ML:** Sandy silt with 5% clay and trace gravel, dry, non-plastic, loose. Very pale brown in color.	Fill		
	5	5.2	22"	2 / 2 / 3 / 4	5	**GM:** Silty sand with 10% gravel, fine to coarse, dry, loose. Gray brown fill.	Fill		
	5.2	7				**CH:** Clay with trace gravel, dry to moist, medium to high plasticity, soft. Brown red with brown mottles and black nodules.	Clay		
	7	8.5	24"	WOH / 3 / 3 / 5	6	**CH:** Clay with trace gravel and 1" sand seam @ 7.75', dry to moist, medium to high plasticity, soft. Brown red with brown mottles and black nodules.	Clay		
	8.5	9				**CL:** Clayey silt, moist to wet, non-plastic, slightly cohesive, soft. Light brown in color with 1" dark brown unit at 8.5'.	Silt		
	9	9.5	24"	WOH / 3	N/A	**CH:** Clay, dry to moist, medium to high plasticity, soft. Red brown with black and light brown mottles.	Clay		
	9.5	10				**CL:** Silty clay, wet, low to medium plasticity, soft. Light brown with light gray mottles.	Clay		
	10	11				**CH:** Clay, dry to moist, high plasticity, soft. Brown red with brown mottles and black nodules.	Clay		

NOTES: PID= 0.0-0.3ppm, borehole collapsed to 3.0' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-14
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/2/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/2/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
0-2	0	2	21.5"	18 / 35 / 33 / 11	68	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, dry to moist, loose fill. Light gray to light brown in color.	Fill	1510	
	2	4	18.5"	3 / 3 / 4 / 6	7	**CH:** Clay with trace gravel, dry to moist, high plasticity, soft. Brown with brown gray mottles.	Clay		
	4	5	24"	2 / 2 / 2 / 3	4	**CH:** Clay with 10% gravel, dry to moist, high plasticity, firm. Brown with light gray mottles. Well graded fine to coarse brown sand seam @4.25'.	Clay		
	5	6				**CH:** Clay with trace gravel, moist, medium to high plasticity, soft. Brown in color	Clay		
	6	8	24"	3 / 2 / 2 / 3	4	**CH:** same as 5-6'.	Clay		
	8	8.5	24"	WOH / WOH / 6 / 13	N/A	**CH:** Clay, dry to moist, high plasticity, soft to firm. Light brown in color.	Clay		
	8.5	9.5				**CH:** Clay, moist to wet, medium plasticity, soft. Brown gray in color.	Clay		
	9.5	10				**GM**: Sandy gravel, fine to coarse, wet to saturated, loose. Weathered light brown to tan limestone.	Weathered limestone		

NOTES: Collapsed depth of 7' bgs, dry

PID Readings: 0-2' = 0.6, 2-4' = 0.4, 4-6' = 0.3, 6-8' = 0.2, 8-10' = 0.2

RAMBOLL

SOIL BORING LOG

BORING ID: B-15
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/2/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/2/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
1-3	1	3	15.5"	13 / 36 / 24 / 14	60	**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Tan to gray white fill.	Fill	1650	
	3	5	24"	3 / 3 / 3 / 5	6	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown with light gray brown mottles. Dry, non-plastic, loose silt pocket @ 3.5'.	Clay		
	5	6	24"	2 / 1 / 1 / 3	2	**CH:** Clay with trace gravel, dry to moist, medium to high plasticity, soft to firm. Light brown with brown gray mottles and black nodules.	Clay		
	6	7				**CL:** Clay with 10% fine sand, moist to wet, low plasticity, very soft. Gray brown in color.	Clay		
	7	8.75	24"	WOH / WOH / 5 / 45	N/A	**CL:** Clay with 5% fine sand and 5% gravel, moist to wet, low plasticity, very soft to soft. Brown with brown gray mottles.	Clay		
	8.75	9				**SM:** Silty sand , fine to coarse, wet, loose. Tan to light gray.	Sand		
	9	9.25	24"	15 / 8 / 6 / 9	14	**CL:** Clay, dry to moist, low to moderate plasticity, soft.	Clay		
	9.25	9.5				**SW:** Gravely sand with 15% gravel and 5% clay, fine to coarse, wet to saturated, loose. Light gray in color.	Clay		
	9.5	11				**CL:** Clay, dry to moist, high plasticity, firm.	Clay		

NOTES: Water on rod @ 6', collapsed borehole depth = 5' bgs, dry

PID Reading: 1-3' = 0.5, 3-5' = 0.2, 5-7' = 0.2, 7-9' = 0.3, 9-11' = 0.2

RAMBOLL

SOIL BORING LOG

BORING ID: B-16
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/29/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/29/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	11"	20 / 6 / 7 / 6	13	**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Tan to gray white fill.	Fill		
	3	4	24"	3 / 1 / 3 / 4	4	**CH:** Clay, dry to moist, medium plasticity, soft. Gray brown with gray mottles.	Clay		
	4	5				**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Dark brown with brown gray mottles and black nodules.	Clay		
	5	7	11"	3 / 2 / 3 / 3	5	Collapsed material from above intervals, mixture of fill and clay material from 1-5'.	N/A		
	7	8	9.5"	2 / 3 / 3 / 8	6	**CH:** Clay, dry to moist, high plasticity, soft. Brown with brown gray mottles.	Clay		
	8	9				**CL:** Silty clay with 10% fine to coarse sand and trace gravel, moist, low to moderate plasticity, soft. Brown gray with brown mottles.	Clay		
	9	10	24"	7 / 3 / 50/4"	N/A	**CH:** Clay, dry to moist, medium to high plasticity, soft. Brown with orange brown mottles and black nodules. At 10' there is 1" seam: **SC:** Clayey sand with 15% gravel, fine to coarse, wet to saturated, soft. Light brown in color.	Clay/Sand		
	10	11				**CL:** Clay with 5% sand, moist, medium to high plasticity, soft. Brown with orange brown mottles and black nodules.	Clay		

NOTES: PID readings 0.0-2.0ppm, collapsed borehole depth = 2'8", dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-17
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	13"	13 / 8 / 5 / 6	13	**SM:** Silty sand with 15% gravel and 5% clay, well graded, fine to coarse, dry, loose fill. Brown gray in color.	Fill		
	3	5	6.5"	11 / 5 / 3 / 4	8	**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose fill. Gray in color. Possible water on rod at 5' bgs.	Fill		
	5	7	5.5"	3 / 1 / 4 / 3	5	**SM:** Silty sand with 20% gravel, well graded, fine to coarse, dry to moist, loose. Gray in color.	Fill		
	7	9	19"	2 / 2 / 4 / 3	6	**CH:** Clay, dry to moist, high plasticity, soft. Brown red with light brown mottles and few black nodules.	Clay		
	9	11	24"	WOH / 2 / 1 /2	3	**CH:** Clay with 5% gravel, dry to moist, medium to high plasticity, soft. Brown red with red and light brown mottles. At 9.5' 1" seam: **GC** Gravely sand with 10% clay, well graded, moist, loose. Light gray in color.	Clay/Sand		

NOTES: PID= 0.0-0.1ppm, borehole collapsed to 5.5' bgs, dry, no samples taken, apparent void in borehole at 2-4'

RAMBOLL

SOIL BORING LOG

BORING ID: B-18
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	5.5"	3 / 3 / 3 / 3	6	**GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Light gray fill.	Fill		
	3	5	6"	4 / 50/5"	N/A	**GM:** Silty sand with 10% gravel, well graded, fine to coarse, dry, loose. Tan fill.	Fill		
	5	6	16"	12 / 8 / 4 / 4	12	**GM:** Gravely sand with 15% fines, well graded, fine to coarse, dry, loose. Brown tan crushed concrete fill.	Fill		
	6	7				**CH:** Clay, dry to moist, medium to high plasticity, soft. Orange brown with light brown and black mottles.	Clay		
	7	9	19"	10 / 4 / 4 / 6	8	**CH:** Clay, dry to moist, medium to high plasticity, soft. Red brown with light brown mottles and black nodules.	Clay		
	9	11	22"	6 / 3 / 5 / 7	8	**CH:** Clay, dry to moist, medium to high plasticity, firm to stiff. Red brown with light brown mottles and black nodules.	Clay		

NOTES: PID readings 0.0-0.1ppm, collapsed depth of borehole = 4', dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-19
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	17"	38 / 50/5"	N/A	**SM:** Silty sand with 5% gravel, well graded, fine to coarse, dry, loose. Tan to light brown to light gray fill.	Fill		
	2	4	22"	6 / 6 / 8 / 9	14	**CH:** Clay, dry to moist, low to medium plasticity, firm to stiff. Brown red with light brown mottles and black nodules.	Clay		
	4	4.5	24"	6 / 4 / 5 / 5	9	**MH:** Sandy silt with trace gravel and 5% clay, dry, non-plastic, loose. Light brown in color	Silt		
	4.5	5.5				**CH:** Clay, dry to moist, medium plasticity, firm. Orange brown, mottled dark brown and tan with black nodules.	Clay		
	5.5	5.75				**SC:** Clayey sand with trace gravel, well graded, fine to medium, dry to moist, loose. Dark gray brown in color.	Sand		
	5.75	6				**CH:** Clay, dry to moist, medium plasticity, firm. Orange brown, mottled dark brown and tan with black nodules.	Clay		
	6	8	24"	6 / 3 / 5 / 6	8	**CH:** Clay with trace gravel, dry to moist, medium plasticity, firm. Orange brown with red and light brown mottles and black nodules.	Clay		
	8	10	16.5"	3 / 2 / 3 / 4	5	**CH:** Clay with trace gravel, dry to moist, medium to high plasticity, soft. Brown with black nodules.	Clay		

NOTES: PID readings: 0.0-0.1ppm, collapsed depth = 6', dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-20
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.5	19"	50 / 14 / 6 / 8	20	**SW:** Gravely sand, well graded, fine to coarse, dry, loose. Tan to light gray to light brown fill.	Fill		
	1.5	2.5				**SW:** Gravely sand, well graded, fine to coarse, dry to moist, loose. Brown gray fill.	Fill		
	2.5	3				**OH:** Clay, dry to moist, low to medium plasticity, soft to firm. Dark brown with black discoloration at 3'. PID reading at 3' = 0.0 ppm	Clay		
	3	5	19"	4 / 5 / 5 / 5	10	**OH:** Clay, dry to moist, high plasticity, soft to firm. Dark brown and organic with black material/discoloration at 4'.	Clay		
	5	5.5	18"	3 / 50/5"	N/A	**OH:** Clay with 10% sand, dry to moist, medium to high plasticity, firm. Dark brown in color.	Clay		
	5.5	6.5				**CH:** Clay, dry to moist, medium to high plasticity, firm. Brown red with black and light brown mottles.	Clay		
	6.5	6.75				**SW:** Gravely sand, well graded, fine to coarse, saturated, loose. Light brown weathered limestone.	Weathered limestone		
	6.75	7				**GW:** Sandy gravel, well graded, medium, dry to moist, loose. Light gray to tan weathered limestone.	Weathered limestone		
	7	8.75	16"	50/4"	N/A	**CH:** Clay, dry to moist, medium to high plasticity, firm. Brown red with black mottles.	Clay		
	8.75	9				**GW:** Sandy gravel, well graded, medium, dry, loose. Light gray to tan weathered limestone.	Weathered limestone		
	9	10	16"	50 / 50/3"	N/A	**GW:** Sandy gravel, well graded, medium, dry, loose. White to light gray weathered limestone.	Weathered limestone		

NOTES: Dry, no samples taken

PAGE: 1 of 1

RAMBOLL

SOIL BORING LOG

BORING ID: B-21
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigations	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/28/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/28/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	4.0' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	7.5"	5 / 7 / 8 / 9	15	**GM:** Silty sand with 20% gravel and lenses of silty clay, well graded, fine to coarse, dry, loose. Tan to light gray fill.	Fill		
	3	3.25	14"	5 / 1 / 2 / 2	3	**CL:** Silty clay with 15% fine to coarse sand, dry, low plasticity, soft. Dark brown gray in color.	Fill		
	3.25	3.75				**SM:** Silty sand with trace gravel, fine to coarse, dry, loose. Tan fill.	Fill		
	3.75	5				**CH:** Clay, dry to moist, high plasticity, soft. 3.75-4.5': orange brown with light brown mottles. 4.5-5': gray brown with light brown and orange brown mottles.	Clay		
	5	7	11"	WOH / WOH / 2 / 2	N/A	**CH:** Clay, moist to wet, high plasticity, soft. Pale orange brown with light brown mottles and black nodules.	Clay		
	7	7.5	24"	4 / 50/4"	N/A	**CH:** Clay with 5% fine to medium sand, dry to moist, high plasticity, soft. Light brown in color.	Clay		
	7.5	8				**CL:** Silty clay with 10% fine to medium sand, wet to saturated, very soft. Light brown in color.	Clay		
	8	9				**CH:** Clay with trace gravel and 15% fine to coarse sand, medium to high plasticity, firm. Brown with light gray mottles and black nodules.	Clay		
	9	11	5"	50/2"	N/A	**CH:** Clay with trace gravel and 15% fine to coarse sand, medium to high plasticity, dry to moist, soft to firm. Gray brown with light gray mottles and black nodules.	Clay		

NOTES: PID Readings = 0.0-0.1ppm, collapsed depth = 8.5', DTW = 4.0' bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-22
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/29/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/29/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	4.0' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	15"	22 / 25 / 18 / 18	43	**GW:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Gray white, tan, and white fill. Crushed concrete from 1-1.25'.	Fill		
	3	4	3.5"	6 / 6 / 6 / 3	12	**GW:** Silty sand with 25% gravel, well graded, fine to coarse, dry, loose. Gray white, tan, and white fill. Poor recovery.	Fill		
	4	5				**ML:** Sandy silt with 5% gravel, moist, non-plastic, loose. Light brown in color. Poor recovery.	Silt		
	5	7	13"	WOH	N/A	**CL:** Clay with 5% fine to medium sand, moist to wet, low to medium plasticity, soft. Brown gray in color.	Clay		
	7	9	19.5"	WOH	N/A	**CL:** Silty clay with 10% fine sand and trace gravel, wet to saturated, low plasticity, soft. Dark gray brown in color.	Clay		
	9	10.25	20.5"	3 / 8 / 27 / 21	35	**CL:** Silty clay with 10% fine to coarse sand and trace gravel, moist, medium to high plasticity, soft. Orange brown with dark brown mottles and black nodules.	Clay		
	10.25	11				**GC:** Clayey sand with 20% gravel, well graded, fine to coarse, wet to saturated, loose. Tan to pale brown in color.	Sand		

NOTES: PID readings = 0.0 ppm, collapsed depth = 6', DTW = 4.0' bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-23
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	4" at bottom

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	15"	2 / 1 / 3 / 8	4	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, moist, loose. Gray fill.	Fill		
	3	5	22.5"	7 / 21 / 43 / 45	64	**GM:** Gravel with 15% fines, well graded, fine to coarse, dry to moist, loose. Light gray fill.	Fill		
	5	7	48"	7 / 12 / 14 / 12	26	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, moist, loose. Light brown gray fill.	Fill		
	7	8.75	18.5"	6 / 4 / 2 / 3	6	**GM: S**ilty sand with 15% gravel, well graded, fine to coarse, moist, loose. Light brown gray fill.	Fill		
	8.75	9				**CL:** Silty clay with 5% sand and 5% gravel, dry to moist, medium to high plasticity, soft. Dark brown in color.	Clay		
	9	9.25	22"	WOH	N/A	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, moist, loose. Light brown gray fill.	Fill		
	9.25	10.5				**CL:** Sandy clay with 5% gravel, moist to wet, low plasticity, soft. Dark brown in color.	Clay		
	10.5	11				**CH:** Clay, dry to moist, medium to high plasticity, soft. Orange brown in color.	Clay		

NOTES: PID readings = 0.0-0.1ppm, collapsed depth = 5', 4" of standing water at depth, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-24
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	22.5"	23 / 23 / 36 / 50	59	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, dry, loose. Light gray to tan to light brown fill.	Fill		
	2	4	18.5"	10 / 40 / 22 / 29	62	**GC:** Clayey sand with 10% gravel, well graded, fine to coarse, dry to moist, loose. 2-3': light gray brown, 3-4': dark black, brown, and gray with cinders and block fragments.	Fill		
	4	6	6"	4 / 3 / 3 / 4	6	**ML:** Sandy silt with 5% clay and 5% gravel, dry, non-plastic, loose. Light pale brown in color.	Silt		
	6	8	48"	2 / 3 / 4 / 5	7	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Red brown with light brown mottles and black nodules. 1" seam of well graded sand, dry, loose, dark gray in color.	Clay		
	8	10	48"	4 / 5 / 6 / 10	11	**CH:** Clay with trace gravel, dry to moist, medium to high plasticity, firm. Brown red with light gray mottles.	Clay		

NOTES: PID Readings = 0.0-0.2ppm, collapsed depth = 4' bgs, dry, no samples taken.

RAMBOLL

SOIL BORING LOG

BORING ID: B-25
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	19"	22 / 26 / 16 / 21	42	**SW:** Gravely sand, well graded, fine to coarse, dry, loose. Pale brown to light gray to light brown crushed gravel fill.	Fill		
	2	3.5	48"	19 / 39 / 10 / 11	49	**SW:** Gravely sand, well graded, fine to coarse, dry, loose. Light gray to tan to light brown crushed gravel fill.	Fill		
	3.5	4				**CL:** Silty clay with trace sand, dry to moist, low to medium plasticity, firm. Red brown to dark brown in color.	Clay		
	4	6	48"	6 / 3 / 4 / 5	7	**CH:** Clay, dry to moist, medium plasticity, firm. Orange brown with tan mottling and approximately 1 mm black nodules .	Clay		
	6	8	48"	4 / 5 / 8 / 10	13	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown with tan mottles and black nodules.	Clay		
	8	10	48"	3 / 5 / 6 / 10	11	**CH:** Cay, dry to moist, medium to high plasticity, firm. Orange brown with tan and light brown to red brown mottles and black nodules.	Clay		

NOTES: Collapsed depth = 4.5' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-26
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	6.51' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	48"	3 / 4 / 5 / 8	9	**CH:** Clay, dry to moist, medium to high plasticity, firm to stiff. Red brown to orange brown with tan and orange brown mottles and black nodules.	Clay		
	3	5	48"	4 / 5 / 7 / 12	12	**CH:** Clay with 15% gravel, dry to moist, medium to high plasticity, firm to stiff. Red brown to orange brown with tan and orange brown mottles and black nodules around wood fragments. PID = 0.0 ppm	Clay		
	5	6.9	48"	4 / 4 / 5 / 50/3"	9	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown with light brown and black mottles.	Clay		
	6.9	7				**GP:** Sandy gravel, poorly graded, medium, saturated, loose. Pale brown weathered limestone.	Weathered limestone		
	7	9	12"	50/4"	N/A	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown in color.	Clay		
	9	9.5	12"	4 / 50/4"	N/A	**CL:** Silty clay with 10% fine sand, dry to moist, medium to high plasticity, soft. Brown red in color.	Clay		
	9.5	10				**GW:** Sandy gravel, well graded, fine to coarse, saturated, loose. Tan to pale brown weathered limestone.	Weathered limestone		

NOTES: DTW: 6.51'bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-27
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/25/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/25/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	24"	21 / 23 / 11 / 11	34	**GW:** Well graded gravel, dry , loose. Mixed tan fill and concrete debris.	Fill/ Concrete		
	3	4.5	13"	17 / 11 / 5 / 6	16	**GW:** Well graded gravel, dry , loose. Mixed tan fill and concrete debris.	Fill/ Concrete		
	4.5	5				**CH:** Clay, moist, high plasticity, soft. Dark brown red with black mottles.	Clay		
	5	7	48"	4 / 4 / 5 / 8	9	**CH:** Clay, moist, medium plasticity, soft to firm. Dark brown red with black mottles.	Clay		
	7	7.5	10"	50/3"	N/A	**CH:** Clay, moist, medium plasticity, soft to firm. Dark brown red with black mottles.	Clay		
	7.5	8				**GW:** Gravel sized weathered fossiliferous limestone. Tan in color. Refusal at 8' bgs.	Weathered limestone		

NOTES: Refusal at 8' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-28
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/29/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/29/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	15"	20 / 29 / 14 / 7	43	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, dry, loose. Light gray to tan to light brown fill.	Fill		
	3	3.75	11"	3 / 2 / 2 / 3	4	**SM:** Silty sand with 5% gravel, well graded, fine to coarse, dry, loose. Tan fill.	Fill		
	3.75	4.5				**CL:** Silty clay with trace gravel and 5% fine to medium sand, dry to moist, medium to high plasticity, soft. Brown gray in color.	Clay		
	4.5	5				**CH:** Clay, dry to moist, high plasticity, soft. Orange brown with gray brown mottles and black nodules.	Clay		
	5	5.25	24"	4 / 4 / 5 / 7	9	CL: Silty clay with 10% fine to medium sand and 5% gravel, dry to moist, soft. Dark gray brown in color. 1" dry, loose, well graded silty sand lens.	Clay		
	5.25	7				**CL:** Silty clay with 5% fine to coarse sand and 5% gravel, dry to moist, low plasticity, soft to firm. Red brown with light gray mottles and black nodules.	Clay		
	7	9	21.5"	2 / 4 / 50/3"	N/A	**CH:** Clay with 5% fine to coarse sand and trace gravel, dry to moist, medium to high plasticity, soft to firm. Orange brown to light brown with light gray to orange brown mottles and black nodules. At 8': well graded, silty sand lens, fine to coarse, dry, gray color.	Clay		
	9	10.5	13"	50/5"	N/A	**CL:** Silty clay with trace fine to coarse sand, dry to moist, low plasticity, soft to firm. Red brown with light brown mottles and black nodules.	Clay		
	10.5	11				**SM:** Silty sand, fine to coarse, dry, loose. Weathered grey white limestone.	Weathered limestone		

NOTES: PID readings = 0.0ppm, collapsed depth = 4'8", minimal moisture at bottom of borehole, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-29
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/27/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/27/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	2.5	18"	5 / 3 / 4 / 4	7	**SW:** Sand with 5% gravel, well graded, fine to medium, moist, loose. Brown gray fill.	Fill		
	2.5	3				**GM:** Silty sand with 20% gravel and 10% clay, well graded, fine to coarse, moist, loose. Light gray fill.	Fill		
	3	5	22"	4 / 6 / 4 / 3	10	**GM:** Silty sand with 15% gravel and 10% clay, well graded, fine to coarse, moist, loose. Light gray fill.	Fill		
	5	6.5	22"	2 / 1 / 4 / 4	5	**GM:** Silty sand with 15% gravel and 10% clay, well graded, fine to coarse, moist, loose. Light gray fill.	Fill		
	6.5	7				**CH:** Clay with 5% sand, dry to moist, medium to high plasticity, soft. Dark brown gray to brown in color.	Clay		
	7	8	14"	2 / 3 / 3 / 5	6	**GM:** Sandy gravel with 10% fines, well graded, fine to coarse, saturated, loose. Very light gray weathered limestone.	Weathered limestone		
	8	9				**CH:** Clay with 5% sand, dry to moist, medium to high plasticity, soft. Brown with red brown mottles.	Clay		
	9	11	9"	2 / 4 / 5 / 11	9	**CL:** Sandy clay with 5% gravel, wet, low plasticity, soft. Gray brown in color.	Clay		

NOTES: PID readings = 0.0-0.2ppm, collapsed depth = 1.6' bgs, dry, no samples collected

RAMBOLL

SOIL BORING LOG

BORING ID: B-30
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	48"	13 / 18 / 42 / 44	60	**GW:** Sandy gravel, well graded, fine to coarse, dry to moist, loose. Tan to pale brown to light gray crushed concrete gravel.	Crushed concrete		
	2	4	48"	10 / 43 / 44 / 50	87	**GW:** Sandy gravel, well graded, dry to moist, wet from 2.5-3', loose. Tan to pale brown fill.	Fill		
	4	4.5	14"	19 / 21 / 11 / 15	32	**GW:** Sandy gravel, well graded, moist, loose. Tan to pale brown fill.	Fill		
	4.5	5.5				**GW:** Sandy gravel, well graded, fine to coarse, dry, loose. Light gray to white crushed concrete.	Crushed concrete		
	5.5	6				**CL:** Silty clay with 10% sand and 5% gravel, dry to moist, low to medium plasticity, soft. Dark brown fill.	Fill		
	6	7	11"	10 / 11 / 7 / 50/5"	18	**CL:** Sandy clay with 15% gravel, dry to moist, low plasticity, soft. Dark gray brown fill.	Fill		
	7	8				**GW:** Sandy gravel, well graded, fine to coarse, dry, loose. Light gray to white crushed concrete.	Crushed concrete		

NOTES: Refusal at 8', 2" of standing water at bottom of borehole, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-31
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	48"	8 / 8 / 5 / 7	13	**SW:** Gravely sand, well graded, fine to coarse, moist, loose. Light gray crushed concrete fill.	Crushed concrete		
	2	4	19"	3 / 23 / 31 / 16	54	**GW:** Sandy gravel, well graded, fine to coarse, dry to moist, loose. Light gray to tan to light brown fill.	Fill		
	4	6	7"	50/3"	N/A	**GW:** Sandy gravel, well graded, fine to coarse, dry to moist, loose. Light gray to tan to light brown fill. Very bottom is well graded, medium sand.	Fill		
	6	7	15"	9 / 50/4"	N/A	**SW:** Sandy gravel, well graded, fine to coarse, dry, loose. Light brown to light brown gray fill.	Fill		
	7	8				**GW:** Sandy gravel, well graded, fine to coarse, dry, loose. White to light gray crushed concrete fill.	Crushed concrete		

NOTES: Collapsed depth = 5' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-32
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	6.35' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.75	21"	11 / 5 / 5 / 5	10	**GW:** Gravel, well graded, fine to coarse, dry, loose. Light gray to tan to light brown in color.	Gravel		
	1.75	3				**OH:** Clay, dry to moist, medium to high plasticity, firm. Dark red brown with brown gray mottling and organic/wood particles with associated black discoloration.	Clay		
	3	4.5	13"	4 / 3 / 4 / 19	7	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown with brown gray and black mottles.	Clay		
	4.5	5				**CL:** Silty clay with 20% calcareous gravel, dry, low plasticity, soft. Light brown to gray in color.	Clay		
	5	7	7"	24 / 19 / 3 / 5	22	**GP:** Sandy gravel, poorly graded, medium to coarse, saturated, loose. Tan to light grey, well cemented fossiliferous limestone.	Weathered limestone		
	7	7.75	46"	6 / 4 / 3 / 6	7	**GP:** Sandy gravel, poorly graded, medium to coarse, saturated, loose. Gray brown, well cemented fossiliferous limestone.	Weathered limestone		
	7.75	9				**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown with black and gray brown mottling.	Clay		
	9	9.75	24"	50/3"	N/A	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown with black and gray brown mottling.	Clay		
	9.75	10				**GP:** Sandy gravel, poorly graded, medium to coarse, saturated, loose. Gray brown, well cemented fossiliferous limestone.	Weathered limestone		

NOTES: DTW = 6.35', DTB = 10.04', Stickup = 17"

B-32-GW sampled at 1540

Collapsed depth = 6' bgs

RAMBOLL

SOIL BORING LOG

BORING ID: B-33
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/2/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/2/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	4.2' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.2	16"	14 / 14 / 16 / 8	30	**GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Light gray to tan crushed concrete fill.	Fill		
	1.2	2				**CL:** Sandy clay, moist, low plasticity, soft. Dark gray brown in color.	Fill		
	2	3				**GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Light gray to tan crushed concrete fill.	Fill		
	3	5	6"	7 / 7 / 8 / 10	15	**CL:** Silty clay with 5% fine sand and trace gravel, dry to moist, non-plastic, soft. Dark brown in color.	Clay		
	5	6.5	24"	5 / 2 / 6 / 7	8	**CH:** Clay, dry to moist, high plasticity, soft to firm. Brown red with light brown mottles. Pockets of well graded fine to medium sand with 5% gravel, moist, loose, gray in color.	Clay		
	6.5	7				**CH:** Clay, dry to moist, medium to high plasticity, firm. Orange brown with light brown and orange mottling.	Clay		
	7	8	24"	3 / 4 / 5 / 7	9	**CH:** Clay with 5% gravel, dry to moist, medium to high plasticity, firm. Yellow brown with orange mottles and black nodules.	Clay		
	8	9				**CH:** Clay with 5% gravel, dry to moist, medium to high plasticity, firm to stiff. Orange brown with light gray brown mottling and black nodules.	Clay		
	9	10	24"	5 / 7 / 13 / 13	20	**CL:** Clay, dry to moist, non-plastic to low plasticity, firm to stiff. Orange brown with gray brown and red brown mottling.	Clay		
	10	11				**CL:** Clay with trace fine to coarse sand and gravel, moist to wet, low plasticity, soft. Brown, gray brown and orange brown mottling.	Clay		

NOTES: PID Readings = 0.0ppm, collapsed depth = 4.5'bgs, DTW 4.2' bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-34
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/1/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/1/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.5	14.5"	5 / 5 / 5 / 7	10	**GW:** Gravel, dry, loose. White, crushed concrete gravel.	Crushed concrete		
	1.5	2				**CL:** Sandy clay with 15% gravel, dry to moist, low plasticity, firm. Brown gray in color with cinders.	Fill		
	2	2.5				**CH:** Clay, dry to moist, medium to high plasticity, firm to stiff. Dark gray with red brown mottling.	Clay		
	2.5	3				**GM:** Silty sand with 20% gravel, well graded, fine to medium, moist, loose. Gray in color.	Sand		
	3	3.5	19"	4 / 3 / 2 / 3	5	**CL:** Silty clay with 15% sand and 5% gravel, dry to moist, low plasticity, soft. Light brown in color.	Clay		
	3.5	3.75				**GM:** Sandy gravel with 10% fines, well graded, fine to coarse, dry to moist, loose. Multicolored: browns, black, oranges, and browns.	Gravel		
	3.75	5				**CH:** Clay, moist, medium to high plasticity, soft. Brown gray with black nodules.	Clay		
	5	5.5	21"	6 / 6 / 6 / 8	12	**CL:** Sandy clay, fine to medium, moist to wet, low plasticity, soft. Dark gray in color.	Clay		
	5.5	6				**CH:** Clay, moist to wet, high plasticity, soft. Dark orange brown with brown gray, light brown, and black mottling.	Clay		
	6	7				**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Light orange brown with light gray brown mottling.	Clay		
	7	8	18.5"	3 / 2 / 50/5"	N/A	**CH:** Clay, dry to moist, high plasticity, soft to firm. Light brown to brown red and orange brown mottling. Trace fine to medium sand from 7.5-8'.	Clay		
	8	8.75				**CH:** Clay, moist, medium to high plasticity, soft. Brown in color.	Clay		
	8.75	9				**GP:** Sandy gravel, poorly graded, fine to coarse, wet, loose. Gray white to tan weathered limestone.	Weathered limestone		
	9	10.5	N/A	50/5"	N/A	**CH:** Clay, moist, medium to high plasticity, soft. Brown in color. Possible slough.	Clay		
	10.5	11				**GP:** Sandy gravel, poorly graded, fine to coarse, wet, loose. Gray white to tan weathered limestone.	Weathered limestone		

NOTES: PID Readings = 0.0-0.1ppm, collapsed depth = 3' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-35
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/25/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/25/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	1.75	12.5"	10 / 4 / 10 / 18	14	**CL:** Silty clay with 10% gravel and 5% fine to medium sand, dry to moist, low to medium plasticity, soft to firm. Brown in color.	Clay		
	1.75	2				**GC:** Clayey sand with 10% gravel, well graded, fine to coarse, dry to moist, loose. Dark brown to gray in color.	Sand		
	2	2.5	15"	5 / 2 / 19 / 23	21	**SM:** Silty sand with 5% gravel, well graded, medium to coarse, dry to moist, loose. Dark brown in color.	Sand		
	2.5	3				**CL:** Silty clay with 10% fine sand and trace gravel, moist, low plasticity, soft. Brown in color.	Clay		
	3	3.25				**CH:** Clay, dry to moist, high plasticity, firm. Red in color.	Clay		
	3.25	3.75				**ML:** Sandy silt with 5% clay and trace gravel, moist, non-plastic, soft. Light brown in color.	Silt		
	3.75	4				**SM:** Silty sand, well graded, fine to coarse, dry, loose. Gray white crushed core wall.	Sand		
	4	5	16.5"	14 / 8 / 5 / 3	13	**SC:** Clayey sand with 5% gravel, poorly graded, fine to medium, dry, loose. Dark gray brown with cinders at 5'.	Sand		
	5	6				**ML:** Clayey silt, wet to saturated, non-plastic, soft. Light brown with gray brown mottling.	Silt		
	6	6.25	24"	2 / 1 / 1 / 3	2	**ML:** Clayey silt with 10% fine sand, dry, non-plastic, slightly cohesive, loose.	Silt		
	6.25	6.5				**ML:** Silt with 5% clay, moist, non-plastic, slightly cohesive, soft. Light brown in color.	Silt		
	6.5	7.5				**CL:** Clay with 5% fine to medium sand and trace gravel, wet, low to medium plasticity, soft. Brown red with gray brown mottling and black nodules.	Clay		
	7.5	8				**CL:** Silty clay with 5% fine to medium sand, trace gravel, moist, medium to high plastic, soft to firm. Brown in color.	Clay		
	8	8.5	18.5"	4 / 6 / 5 / 6	11	**CL:** Silty clay with 10% fine sand, dry to moist, low plasticity, soft. Light brown with very dark brown mottling.	Clay		
	8.5	10				**CH:** Clay with 5% fine to coarse sand, dry to moist, medium to high plasticity, firm to stiff. Brown with orange brown mottling.	Clay		

NOTES: PID Readings = 0.0ppm, collapsed depth = 4.5' bgs, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-36
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/29/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/29/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	5.9' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	0.5	10.5"	4 / 6 / 4 / 4	10	**CL:** Sandy clay with 15% fine to medium sand, moist, low plasticity, soft. Brown red with gray and orange mottles.	Clay		
	0.5	1				**SC:** Clayey sand with trace gravel, well graded, fine to medium, dry to moist, loose. Brown in color.	Sand		
	1	2				**SM:** Silty sand with 15% gravel and 5% clay, well graded, fine to coarse, moist, loose. Light brown in color.	Sand		
	2	4	19"	8 / 11 / 9 / 11	20	**SP:** Sand with 5% fines, poorly graded, fine, moist to wet, loose. Orange to light brown in color.	Sand		
	4	4.5	21"	4 / 8 / 3 / 3	11	**SP:** Sand with 10% clay, poorly graded, fine, moist, loose. Light brown in color.	Sand		
	4.5	5				**ML:** Clayey silt, wet, non-plastic, soft. Light brown in color.	Silt		
	5	5.25				**CL:** Silty clay, wet to saturated, low plasticity, soft. Very light brown to cream in color.	Clay		
	5.25	6				**CH:** Clay with 5% gravel and trace fine to medium sand, moist, high plasticity, soft. Red brown with light brown mottling and black nodules.	Clay		
	6	7.25	15"	WOH / WOH / 3 / 4	N/A	**CH:** Clay, dry to moist, high plasticity, soft. At 6.5' there is a 2.5" sand lens. Brown red with light brown mottling and black nodules.	Clay		
	7.25	8				**CH:** Clay with 10% gravel, dry to moist, high to medium plasticity, soft to firm. Gray brown in color.	Clay		
	8	9.5	24"	2 / 3 / 3 / 18	6	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Red brown with light gray brown mottling and black nodules.	Clay		
	9.5	10				**GP:** Sandy gravel, poorly graded, fine to medium, wet to saturated, loose. Tan to brown white weathered limestone.	Weathered limestone		

NOTES: PID Readings = 0.0-0.1ppm, DTW = 5.9' bgs. Collapsed depth 5'9" bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-38
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	16"	18 / 17 / 4 / 10	21	**GW:** Sandy gravel, well graded, fine to coarse, loose. Moisture increases with depth. Crushed concrete gravel.	Crushed concrete		
	3	3.1	48"	5 / 5 / 5 / 6	10	**GW:** Sandy gravel, well graded, fine to coarse, loose. Moisture increases with depth. Crushed concrete gravel.	Crushed concrete		
	3.1	5				**CH:** Clay, dry to moist, medium to high plasticity, soft. Red brown to brown with black and dark brown mottling.	Clay		
	5	7	48"	4 / 6 / 8 / 9	14	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown to brown with light brown mottling and black nodules.	Clay		
	7	7.5	12"	50/4"	N/A	**CH:** Clay, dry to moist, medium to high plasticity, firm. Red brown to brown with light brown mottling and black nodules.	Clay		

NOTES: Refusal at 7.5', evidence of limestone bedrock, dry, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-39
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	10/26/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	10/26/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	0.5	16"	2 / 3 / 2 / 6	5	**GW:** Well graded gravel fill	Fill		
	0.5	1				**Concrete**	Concrete		
	1	3				**SM:** Silty sand with 5% gravel and 15% clay, well graded, fine to coarse, moist, soft. Tan to light gray fill.	Fill		
	3	5	48"	20 / 48 / 44 / 38	92	**SW:** Gravely sand, well graded, fine to coarse, dry to moist, loose. Tan to light gray to light brown fill.	Fill		
	5	7.25	48"	10 / 9 / 9 / 10	18	**SW:** Gravely sand, well graded, fine to coarse, dry to moist, loose. Tan to light gray to light brown fill.	Fill		
	7.25	8				**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown with black nodules.	Clay		
	8	9	15"	3 / 4 / 3 / 7	7	Same fill as 5-7.25', possible slough from borehole.	Fill		
	9	10				**CH:** Clay with 5% sand , dry to moist, medium to high plasticity, soft. Red brown in color.	Clay		

NOTES: 1" of water at bottom of borehole, collapsed depth = 8' bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-40
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/2/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/2/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	4.2' bgs

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	23.5"	8 / 24 / 38 / 26	62	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, dry to moist, loose. Tan to light gray with some light gray mottling. Fill.	Fill		
	3	5	24"	5 / 4 / 4 / 5	8	**ML:** Sandy silt with trace clay and trace gravel, moist, non-plastic, firm to stiff. Tan with orange brown and light brown mottling. Fill.	Fill		
	5	7	5.5"	4 / 7 / 3 / 4	10	**SC:** Clayey sand, well graded, fine to coarse, wet to saturated, loose. Very low recovery, light brown with light gray and red brown mottling.	Sand		
	7	9	24"	4 / 5 / 3 / 6	8	**GM:** Gravely silt with 10% clay and 20% fine to coarse sand, well graded, fine to coarse, wet to saturated, non-plastic, soft to firm. Tan to light gray in color with wood fragments. Fill.	Fill		
	9	10	24"	5 / 7 / 11 / 14	18	**SC:** Clayey sand, well graded, fine to coarse, wet to saturated, loose. Very low recovery, Light brown with light gray and red brown mottling.	Fill		
	10	10.25				**ML:** Sandy silt with trace gravel, moist, non-plastic, soft. Light gray in color.	Silt		
	10.25	11				**CH:** Clay, dry to moist, medium to high plasticity, firm. Orange brown with gray brown mottling and black nodules.	Clay		

NOTES: PID Readings = 0.0 ppm, DTW = 4.1' bgs, collapsed depth = 6' bgs, no samples taken

RAMBOLL

SOIL BORING LOG

BORING ID: B-41
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/2/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/2/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	0	2	21"	6 / 19 / 23 / 13	42	**SM:** Silty sand with 10% gravel, well graded, fine to coarse, dry to moist, loose. Gray fill.	Fill		
	2	3	23"	13 / 12 / 18 / 7	30	**SM:** Silty sand with 10% gravel, well graded, fine to coarse, moist, loose. Gray fill.	Fill		
	3	4				**SM:** Silty sand with 20% gravel and 10% clay, well graded, fine to coarse, moist, loose. Light brown with light gray mottling.	Fill		
	4	6	24"	2 / 2 / 2 / 5	4	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown red with light brown mottling and black nodules.	Clay		
	6	8	24"	4 / 4 / 6 / 9	10	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown red with light brown mottling and black nodules.	Clay		
8-10	8	10	24"	3 / 3 / 5 / 7	8	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown red with light brown mottling and black nodules. At 10': poorly graded, fine sand, wet, strong petroleum-like odor, stained black.	Clay	1300	

NOTES: Dry, collapsed depth = 2.5'

RAMBOLL

SOIL BORING LOG

BORING ID: B-42
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/4/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/4/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.75	14"	3 / 4 / 11 / 14	15	**SM:** Silty sand with trace gravel, well graded, fine to coarse, dry, loose. Crushed concrete.	Crushed concrete		
	1.75	2.25				**SW:** Sand with 5% fines, well graded, fine to coarse, moist, loose. Light brown to dark black brown. Moderately strong petroleum-like odor from 2-2.86'.	Sand		
	2.25	3				**GW:** Sandy gravel, well graded, fine to coarse, dry, loose. Crushed concrete.	Crushed concrete		
	3	3.5	15"	7 / 7 / 10 / 7	17	**GM:** Sandy gravel with 20% fines, well graded, fine to coarse, dry to moist, loose. Brown gray in color.	Gravel		
	3.5	4.75				**GM:** Sandy gravel with 20% fines, well graded, fine to coarse, dry, loose. Gray to brown white in color.	Gravel		
	4.75	5				**GM:** Sandy gravel with 20% fines, well graded, fine to coarse, dry, loose. Brown gray with black staining. Low to moderate petroleum-like odor.	Gravel		
5-7	5	5.25	24"	4 / 2 / 1 / 3	3	**SM:** Silty sand, well graded, fine to medium, dry, loose. Light brown gray with strong petroleum-like odor.	Sand	0935	
	5.25	7				**CL:** Silty clay with 5% fine sand, moist, low plasticity, soft. Gray brown with strong petroleum-like odor.	Clay		
	7	8.5	19"	5 / 1 / 2 / 5	3	**CL:** Silty clay with 5% fine sand, moist to wet, low plasticity, soft. Gray brown with strong petroleum-like odor.	Clay		
	8.5	9				**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Gray brown with black nodules. Strong petroleum-like odor.	Clay		
	9	10.5	24"	4 / 4 / 5 / 7	9	**CH:** Clay, dry to moist, medium to high plasticity, soft. Gray brown with black nodules and strong petroleum-like odor.	Clay		
	10.5	11				**CL:** Clay with 15% gravel and 5% fine to coarse sand, dry to moist, medium plasticity, firm. Gray brown with black nodules and strong petroleum-like odor.	Clay		

NOTES: PID Readings (ppm): 1-3' = 0.4, 3-5'= 2.5, 5-7' = 136.3, 7-9' = 68.5, 9-11' = 51.4

Water on rod at 7', no GW collected

RAMBOLL

SOIL BORING LOG

BORING ID: B-42A
INSPECTOR: Vitaliy Morozov

PROJECT:	Catalent Geotechnical Boring	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/4/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St. Bloomington, IN	DATE COMPLETED:	11/4/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Environmental Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	13.5"	3 / 3 / 6 / 5	9	**GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry to moist, loose. Gray brown to dark brown/black. Wet at 3'.	Fill		
	3	5	10"	13 / 13 / 13 / 10	26	**GM:** Silty sand with 15% gravel, well graded, fine to coarse, dry, loose. Dark brown to gray white at depth. Slight to moderate petroleum-like odor.	Fill		
	5	5.25	24"	5 / 4 /4 / 6	8	**CL:** Clay with 15% gravel, dry to moist, low to medium plasticity, soft. Red brown with light brown mottling and black nodules. Very slight petroleum-like odor.	Clay		
	5.25	7				**CH:** Clay, dry to moist, medium to high plasticity, firm to stiff. Red brown with light brown mottling and black nodules. Very slight petroleum-like odor.	Clay		
	7	9	10"	5 / 6 / 6 / 7	12	**CH:** Clay, dry to moist, medium to high plasticity, firm to stiff. Red brown with light brown mottling and black nodules. Very slight petroleum-like odor. At 7.5' there is a well graded, fine to coarse silty sand lens that is brown gray in odor and has moderate petroleum-like odor.	Clay		
9-11	9	11	18"	3 / 4 / 3 / 4	7	**CL:** Clay with 15% gravel and 10% fine to medium sand, dry to moist, high plasticity, firm. Brown with red brown and light brown mottling and a strong petroleum-like odor.	Clay	1053	

NOTES: PID Readings (ppm): 1-3' = 1.3, 3-5' = 1.8, 5-7' = 2.9, 7-9' = 1.1, 9-11' = 19.5

Collapsed depth = 2.5', dry

RAMBOLL

SOIL BORING LOG

BORING ID: B-42B
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/4/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/4/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Environmental Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.5	15.5"	3 / 1 / 2 / 23	3	**SM:** Silty sand, well graded, fine to coarse, dry, loose. Crushed concrete.	Crushed concrete		
	1.5	2				**SP:** Sand, poorly graded, fine to medium, moist, loose. Light brown in color.	Sand		
	2	3				**CL:** Sandy clay with 10% gravel, dry to moist, low plasticity, soft. Light brown in color.	Clay		
	3	5	12.5"	8 / 38 / 14 / 7	52	**SM:** Silty sand with 15% gravel, well graded, fine to coarse, dry to moist, loose. Light gray brown to gray white in color. Black at 4' with slight petroleum-like odor.	Sand		
	5	5.25	24"	2 / 1 / 1 / 3	2	**SM:** Silty sand with trace gravel, well graded, fine to medium, dry to moist, loose. Gray brown in color.	Sand		
	5.25	5.5				**CL:** Silty clay with 15% gravel, moist, low to medium plasticity, soft. Light gray brown with black mottling. Slight petroleum-like odor.	Clay		
	5.5	5.75				**SP:** Sand with 5% fines, poorly graded, fine, moist to wet, loose. Light brown gray in color.	Sand		
	5.75	7				**CH:** Clay with trace fine sand, moist to wet, medium plasticity, soft. Light brown with black nodules, Moderate petroleum-like odor.	Clay		
	7	9	24"	WOH / WOH / 4 / 6	N/A	**CH:** Clay, dry to moist, medium to high plasticity, soft. Wet from 7-7.5'. Brown with light gray brown mottling and black nodules. No odor.	Clay		
9-11	9	11	24"	6 / 5 / 6 / 8	11	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Brown with light gray brown mottling and black nodules. No odor.	Clay	1150	

NOTES: PID Readings (ppm): 1-3' = 1.8, 3-5' = 1.7, 5-7' = 0.6, 7-9' = 0.5, 9-11' = 2.1

Collapsed depth = 5.5', dry

RAMBOLL

SOIL BORING LOG

BORING ID: B-42C
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/4/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/4/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Environmental Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	1.5	21"	3 / 13 / 6 / 4	19	**CL:** Sandy clay with 10% gravel, moist, low to medium plasticity, soft. Dark gray brown with moderate to strong petroleum-like odor.	Clay		
	1.5	2				**SC:** Clayey sand with trace gravel, well graded, fine to medium, dry to moist, loose. Dark gray brown with strong petroleum-like odor.	Sand		
	2	2.25				**GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose. Tan to gray fill.	Fill		
	2.25	3				**CH:** Clay, dry to moist, medium to high plasticity, stiff. Brown with black mottling. At 2.5' there is a sand lens. **SP**: Sand, poorly graded, medium, dry to moist, loose. Black to dark brown with very strong petroleum-like odor.	Clay/Sand		
	3	3.25	16"	2 / 2 / 2 / 4	4	**SP**: Sand with 20% clay, poorly graded, medium, dry to moist, loose. Black to dark brown with very strong petroleum-like odor.	Sand		
	3.25	5				**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Light orange brown with light brown mottling and black nodules. At 3.75' there is a sand lens. **GM:** Silty sand with 20% gravel, well graded, fine to coarse, dry, loose, tan in color.	Clay/Sand		
	5	7	24"	3 / 4 / 5 / 7	9	**CH:** Clay, dry to moist, high plasticity, firm to stiff. Red brown with light gray brown mottling and black nodules. Slight petroleum-like odor.	Clay		
7-9	7	8	21"	3 / 45 / 50/3"	N/A	**CH:** Clay, moist, high plasticity, soft. Red brown with light brown mottling and black nodules. Strong petroleum-like odor.	Clay	1440	
	8	8.5				**CH:** Clay, moist, high plasticity, soft to firm. Brown with black mottling. Sand lens of **SC:** Clayey sand, well graded, fine to medium, saturated, dark brown to black, very strong petroleum-like odor.	Clay/Sand		
	8.5	9				**SM:** Silty sand with 5% gravel, well graded, fine to coarse, dry to moist, loose. Tan weathered limestone with strong petroleum-like odor.	Weathered limestone		
	9	11	6.5"	50/5"	N/A	**SM:** Silty sand with 5% gravel, well graded, fine to coarse, dry to moist, loose. Tan weathered limestone with slight petroleum-like odor.	Weathered limestone		

NOTES: PID Readings (ppm): 1-3' = 39.6, 3-5' = 58.9, 5-7' = 44.6, 7-9' = 82.9, 9-11' = 12.7

Collapsed depth = 5.5' bgs, dry

RAMBOLL

SOIL BORING LOG

BORING ID: B-43
INSPECTOR: Vitaliy Morozov

PROJECT:	Supplemental Investigation	SITE NAME:	Catalent Bloomington	DATE STARTED:	11/1/2021
CLIENT:	Catalent Pharma Solutions	SITE LOC.:	1600 S Rogers St., Bloomington, IN	DATE COMPLETED:	11/1/2021
JOB #:	1690023695	BORING LOC.:	See Map	FINAL STATIC WL:	N/A

DRILLING CONT.:	Geotill	DRILLING METHOD:	Split Spoon	NORTHING:	N/A
FOREMAN:	Micah	HAMMER / FALL:	NA / NA	EASTING:	N/A
RIG TYPE:	Diedrich D-50Turbo, Truck Mount	SAMPLER TYPE:	N/A	ELEVATION:	N/A
PURPOSE:	Geotechnical Boring	SAMPLER DIAMETER:	N/A	DATUM:	N/A

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	Blows/6"	"N" Value	MATERIAL DESCRIPTION	General Stratum Description	Field Testing	
								Time	
	1	3	0"	5 / 6 / 3 / 2	9	No recovery, fill material/crushed concrete fell out of sampler.	Fill		
	3	4	9.5"	2 / 1 / 4 / 4	5	**SM:** Silty sand with 5% gravel, well graded, fine to coarse, dry, loose. Light gray to tan in color. Brick fragments present.	Fill		
	4	5				**CL:** Sandy clay with 10% gravel, dry to moist, low plasticity, soft. Light brown in color.	Fill		
	5	5.25	24"	3 / 4 / 6 / 9	10	**CL:** Sandy clay with 10% gravel, dry to moist, low plasticity, soft. Light brown in color.	Fill		
	5.25	7				**CH:** Clay with 15% gravel, dry to moist, medium to high plasticity, firm. Red brown with light brown mottling and black nodules.	Clay		
	7	9	24"	WOH / 3 / 5 / 6	8	**CH:** Clay, dry to moist, medium to high plasticity, soft to firm. Red brown with light gray mottling and black nodules.	Clay		
	9	11	24"	3 / 3 / 5 / 8	8	**CH:** Clay with 5% gravel, dry to moist, medium to high plasticity, soft to firm. Red brown to orange brown with light gray mottling and black nodules.	Clay		

NOTES: PID Readings = 0.0-0.2 ppm, collapsed depth = 5' bgs, dry, no samples taken

EXHIBIT A
LABORATORY TESTING RESULTS

Moisture Content ASTM D 2216

GEOTILL Engineering Inc.
7732 Loma Court, Fishers IN 46038

Client Name : Ramboll
Attn: Mr. Frank D. West
Project Name Drilling Bloomington, Indiana
Geotill Project No.: 142133402

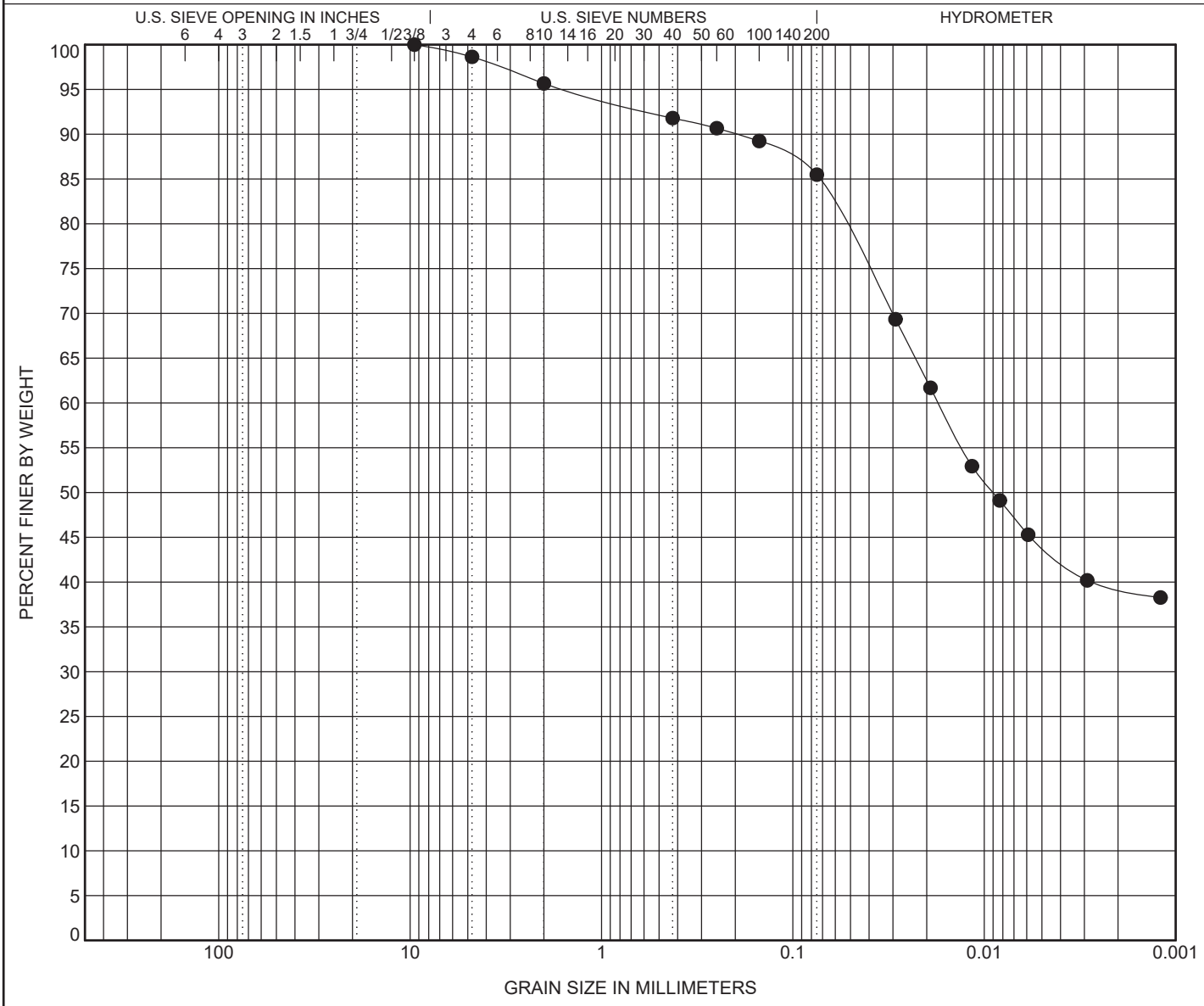
Boring No.	Sample Depth	Mass of Wet Soil + Tare	Mass of Dry Soil +Tare	Mass of Tare	Moisture Cont. %
B-10	3.0-5.0	35.03	28.35	1.74	**25**
	5.0-7.0	43.19	34.65	1.78	**26**
	7.0-9.0	32.27	25.92	1.74	**26**
B-20	3.0-5.0	30.75	23.63	1.83	**33**
B-28	1.0-3.0	32.26	30.1	1.95	**8**

GRAIN SIZE DISTRIBUTION

Geotill Inc.
7732 Loma Ct
Fishers, IN 46038
Telephone: (317) 449-0033
Fax: (317) 285-0609

CLIENT Ramboll **PROJECT NAME** South Parking Lot

PROJECT NUMBER 142133402 **PROJECT LOCATION** 1600 Rogers Street



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-10**	**3.0**	**LEAN CLAY(CL)**	**40**	**20**	**20**		

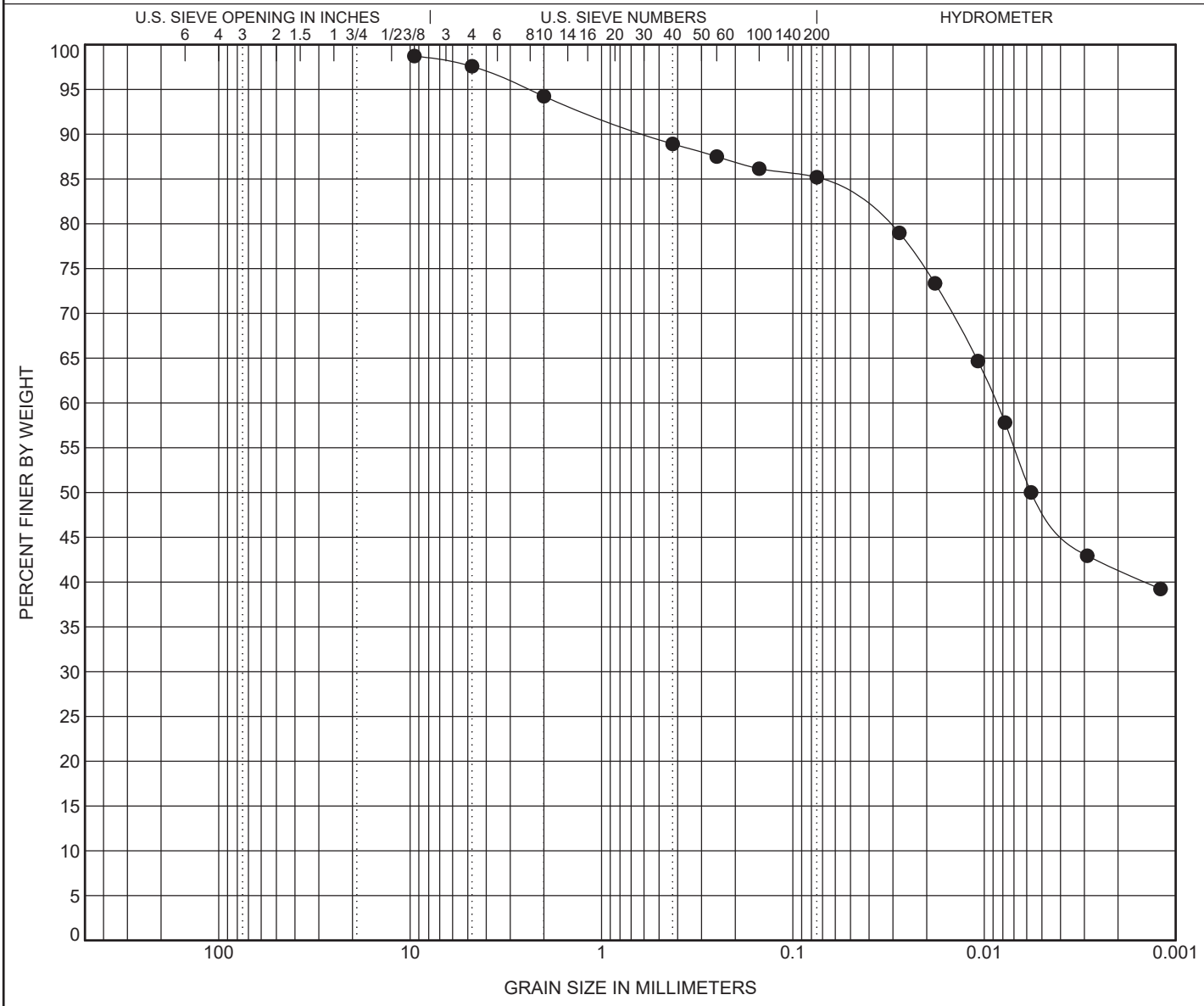
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-10**	**3.0**	**9.5**	**0.017**			**1.4**	**13.2**	**41.4**	**44.1**

GRAIN SIZE DISTRIBUTION

Geotill Inc.
7732 Loma Ct
Fishers, IN 46038
Telephone: (317) 449-0033
Fax: (317) 285-0609

CLIENT Ramboll **PROJECT NAME** South Parking Lot

PROJECT NUMBER 142133402 **PROJECT LOCATION** 1600 Rogers Street



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● **B-20**	**3.0**	**LEAN CLAY(CL)**	**42**	**20**	**22**		

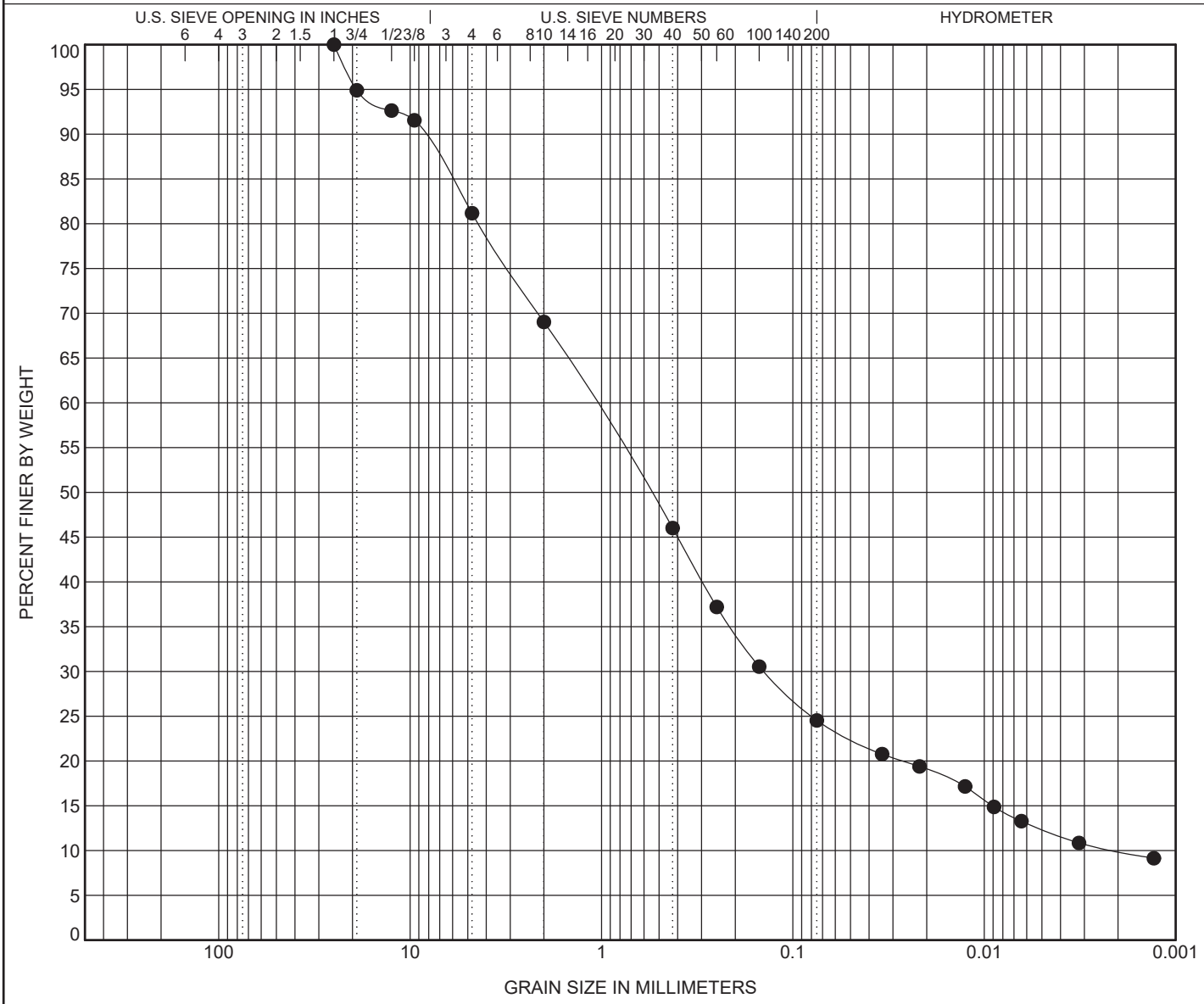
BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **B-20**	**3.0**	**9.5**	**0.009**			**1.1**	**12.4**	**36.6**	**48.6**

GRAIN SIZE DISTRIBUTION

Geotill Inc.
7732 Loma Ct
Fishers, IN 46038
Telephone: (317) 449-0033
Fax: (317) 285-0609

CLIENT Ramboll **PROJECT NAME** South Parking Lot

PROJECT NUMBER 142133402 **PROJECT LOCATION** 1600 Rogers Street



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-28**	**1.0**	**SILTY SAND with GRAVEL(SM)**	**NP**	**NP**	**NP**	**8.92**	**532.40**

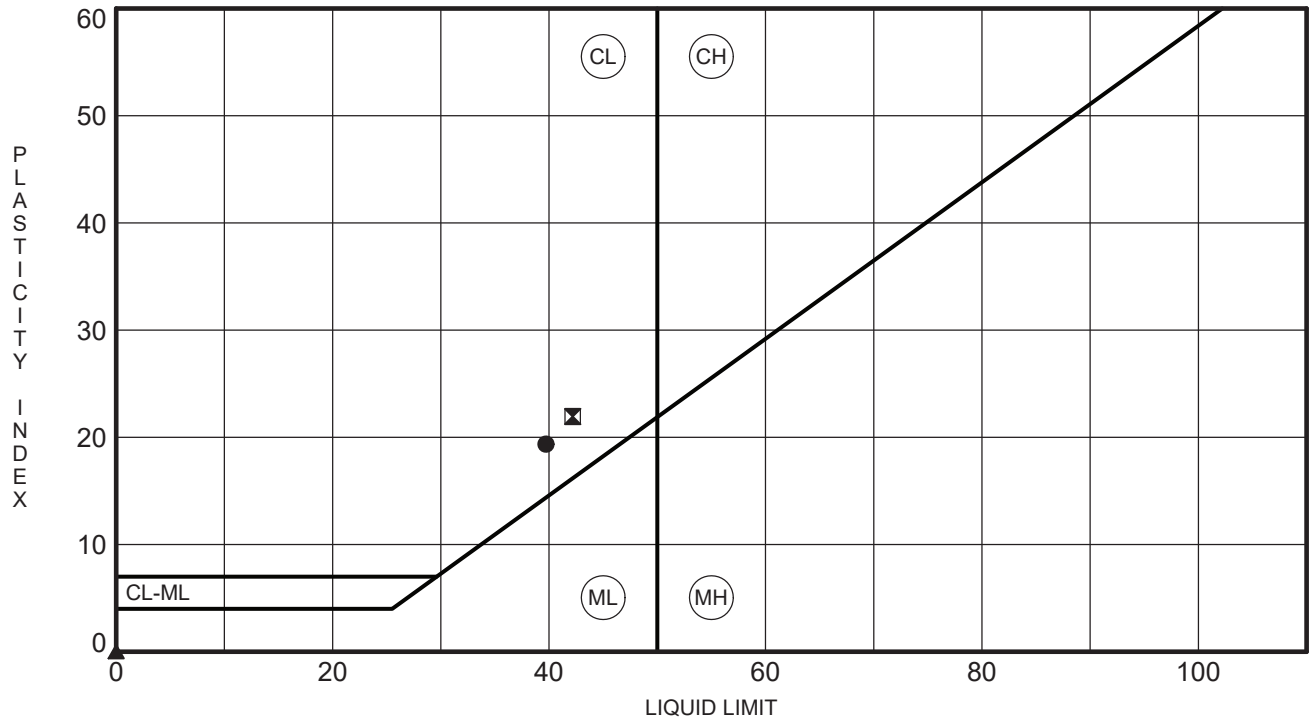
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-28**	**1.0**	**25**	**1.089**	**0.141**	**0.002**	**18.8**	**56.6**	**12.1**	**12.4**

ATTERBERG LIMITS' RESULTS

Geotill Inc.
7732 Loma Ct
Fishers, IN 46038
Telephone: (317) 449-0033
Fax: (317) 285-0609

CLIENT Ramboll **PROJECT NAME** South Parking Lot

PROJECT NUMBER 142133402 **PROJECT LOCATION** 1600 Rogers Street



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**B-10**	**3.0**	**40**	**20**	**20**	**85**	**LEAN CLAY(CL)**
⊠	**B-20**	**3.0**	**42**	**20**	**22**	**85**	**LEAN CLAY(CL)**
▲	**B-28**	**1.0**	**NP**	**NP**	**NP**	**25**	**SILTY SAND with GRAVEL(SM)**

BLOOMINGTON BOARD OF ZONING APPEALS **CASE #: V-02-22**
STAFF REPORT **DATE: February 17, 2022**
Location: 1100 S Strong Drive

PETITIONER: Catalent Indiana, LLC
1300 S. Patterson Drive, Bloomington

CONSULTANT: Bledsoe, Riggert, Cooper, and James
1351 W. Tapp Road, Bloomington

REQUEST: The petitioner is requesting a variance from fence and wall standards and a variance from architectural standards to allow an addition.

REPORT: The property is located at 1100 S. Strong Drive and is located on Tract A within the Thomson PUD. The site has public road frontage along three property lines with Allen Street to the north and Strong Drive that wraps around the east and south property lines. The property has been developed with one 50,000 square foot building that was previously occupied by Best Beers. There is a loading dock and parking area on the south side of the building. There are no known environmental features on the site.

The petitioner has recently acquired this property and building and will be utilizing it for expanded production and storage needs related to the manufacturing of the COVID-19 vaccine. To that end they are proposing a 12,000 square foot addition to the north side of the building to install 58 freestanding freezer units for storage needs. The addition will feature a masonry block wall surrounding the units, but will not have a roof. There will also be an approximately 7,200 square foot addition to the south side of the building for additional storage needs that will include typical walls and roof. The addition would trigger limited compliance with the UDO since it is more than 10% of the existing floor area and those aspects will be reviewed with the minor site plan approval with the grading permit. Those compliance items would include the installation of a sidewalk along Strong Drive and landscaping throughout the property.

As part of a recent government contract to start manufacturing a vaccine for the COVID-19 virus, the petitioner has been directed to secure the perimeter of their facility with a 6' tall fence. This is necessary for heightened security due to the sensitive nature of the work being conducted. It should be noted that due to a declared public health emergency, communities have been encouraged to allow more flexibility in local regulations in response to the global pandemic to promote public safety. To that end, during the pandemic and declared public health emergency, both local government agencies and state government agencies have been more relaxed in enforcing their regulations when it comes to matters that are directly related to the health emergency.

In order to comply with the recommended security precautions, the petitioner is proposing a 6' tall fence, with 7' tall columns that will be spaced a minimum of 12' apart around the perimeter of the property (including around the area of parking between the building and the streets). The UDO prohibits fences that are taller than 4' forward of the front building wall of the primary structure. Since the property was developed prior to current UDO regulations with the building as far back

from the adjacent street frontages as was possible, it is not possible for them to comply with the 4' tall fence allowance to install the recommended 6' tall fencing and they are requesting a variance from the maximum 4' height limit that is allowed.

The petitioner is also requesting a variance from architectural standards for the proposed additions to not require them to meet the architectural standards. This would require modulation, change in building façade height, regular pattern of windows, and/or the incorporation of awnings along the ground floor that is not possible with the existing building design and use. The petitioner is also requesting a variance to allow for a section of barbed wire fence along the west property line to be removed and replaced with new barbed wire.

CRITERIA AND FINDINGS FOR DEVELOPMENT STANDARDS VARIANCE

20.09.130 e) Standards for Granting Variances from Development Standards:

A variance from the development standards of the Unified Development Ordinance may be approved only upon determination in writing that each of the following criteria is met:

1) *The approval will not be injurious to the public health, safety, morals, and general welfare of the community.*

   PROPOSED FINDING:

   Fence Height: The granting of the variance to allow the fence to be the required 6' tall will greatly increase the security of the property to help with the production of a vaccine to address the global public health emergency. This directly promotes the public health, safety, and general welfare of the community.

   Architectural Standards: The granting of the variance to not require the additions to meet architectural standards is not expected to be injurious to the public health, safety, morals, or general welfare of the community. The proposed building wall surrounding the units is a durable masonry material and features elements of visual interest.

   Barbed Wire: The Department finds that the granting of the variance to allow barbed wire would be injurious as this element is something that is not appropriate within the City and the proposed 6' tall fence does provide adequate protection.

2) *The use and value of the area adjacent to the property included in the Development Standards Variance will not be affected in a substantially adverse manner.*

   PROPOSED FINDING:

   Fence Height: No adverse impacts to the use and value of surrounding properties as a result of the requested variance are found. The fence has been appropriately designed with an open lattice design to decrease any visual impacts and increase pedestrian experience. The fence

will be setback from the adjacent sidewalks approximately 10' to 30' with landscaping between the fence and the sidewalk.

Architectural Standards: No adverse impacts to the use or value of the area adjacent to the property are expected as a result of the granting of the variance from the required architectural standards. The additions have been designed to complement the existing building style while adding elements of visual interest.

Barbed Wire: The Department finds that the granting of the variance to allow barbed wire would have an adverse impact on the use and value of the adjacent property, as it allows a nonconforming site feature that is not customary to this type of use or to the adjacent residential uses.

3) *The strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property; that the practical difficulties are peculiar to the property in question; that the Development Standards Variance will relieve the practical difficulties.*

PROPOSED FINDING:

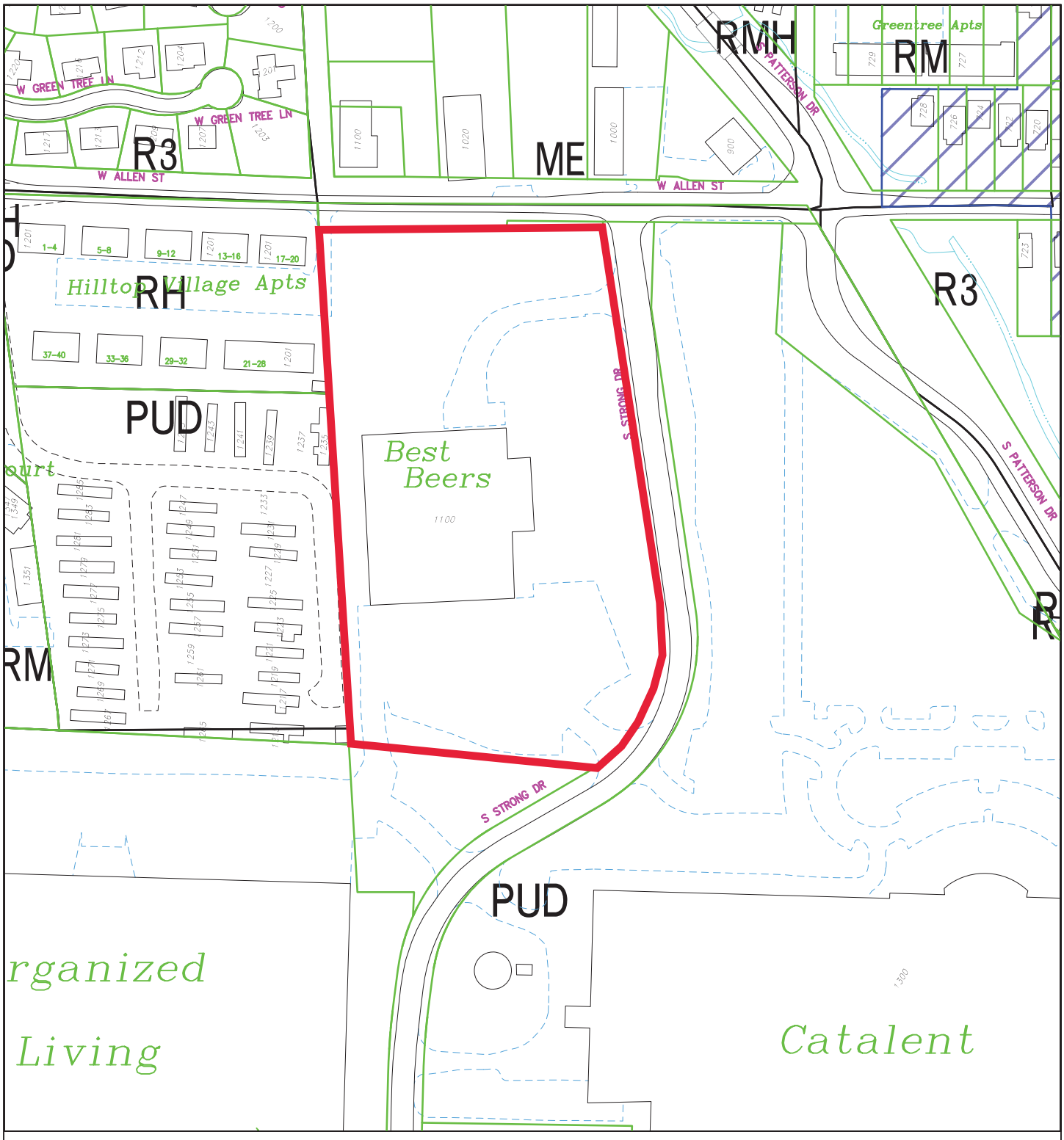
Fence Height: The Department finds that the strict application of the terms of the Unified Development Ordinance will result in practical difficulties of the use of the property because it would not allow the fencing needed to provide appropriate security for this property. The practical difficulties are peculiar to this property in that the site has street frontages along three property lines, it has a unique lot shape, and the location of the existing building and parking areas create difficulties with meeting the code in the use of the property. The granting of the development standards variance will allow the petitioner to meet the stated safety standards for this facility to address the public health emergency.

Architectural Standards: The Department finds that the strict application of the terms of the Unified Development Ordinance will result in practical difficulties in the use of the property as it would require building additions that would not work with the existing building design or shape. It is very difficult to construct compatible additions to existing buildings that currently do not meet design standards. The proposed addition to the south is not highly visible from the street and to require the addition to meet current architectural standards would result in a design that is not complimentary or appropriate.

Barbed Wire: The Department finds no practical difficulty in the use of the site that necessitates a variance for barbed wire. The proposed fencing will provide adequate protection for the site and the denial of the variance request for barbed wire will not result in practical difficulties in the use of the property.

RECOMMENDATION: The Department recommends that the Board of Zoning Appeals adopt the proposed findings and approve the variances from fence height and architectural standards and deny the variance from the barbed wire standard with the following conditions:

1. The areas of the fence facing a public street must be landscaped with a minimum of 5 shrubs at each column.
2. Minor site plan approval is required prior to issuance of a building permit.
3. The request for a variance to allow the use of barbed wire is denied and the use of barbed wire is not allowed.



City of Bloomington
Planning

By: greulice
11 Feb 22

200 0 200 400 600

Scale: 1" = 200'

For reference only; map information NOT warranted.

City of Bloomington
Planning

By: greulice
11 Feb 22

200 0 200 400 600

Scale: 1" = 200'

For reference only; map information NOT warranted.

Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS

January 20, 2022

City of Bloomington Board of Zoning Appeals
401 N. Morton Street
Bloomington, IN 47403

RE: Request for Variances for Catalent Biologics' Facility at 1100 S. Strong Drive

Dear BZA Members:

On behalf of Catalent Biologics, we respectfully request your consideration of the following variances from the Unified Development Ordinance (UDO) for necessary building and site improvements at their facility at 1100 S. Strong Drive:

1. Development Standards & Incentives Section 20.04.070(d), Building Design to allow the exterior perimeter wall of the north freezer containers and the south freezer box to incorporate the following:
    - A 2'-8" change in building façade height to be more in keeping with the façade proportions
    - Wall recesses/projections of ten percent of the maximum wall plane in lieu of 3 percent of the total building length (10% of 40 wall plane = 4' recess)
    - No windows, canopies, or awnings.
    - No roof connection between perimeter wall and freezer containers.

2. Development Standards & Incentives Section 20.04.080(n), Fences and Walls to allow for the installation of a six foot tall perimeter security fence with seven foot high columns along the Allen Street and Strong Drive frontages.

3. Development Standards & Incentives Section 20.04.080(n), Fences and Walls to allow for the replacement of the existing twelve foot tall chain link fence with three strands of barbed wire with a new fence to match the existing along the west side of the property from the northwest corner of the building southwest corner of the property.

4. Development Permits and Procedures Section 20.06.050(C)i, Minor Site Plan Review to allow for building additions exceeding 10,000 square feet.

Catalent Biologics is the leading global provider of advanced delivery technologies, development, and manufacturing solutions for drugs, biologics, cell and gene therapies, and consumer health products. Catalent Biologics is part of Operation Warp Speed (OWS) a public-private partnership, initiated by the federal government to facilitate and accelerate the development, manufacturing, and distribution of COVID-19 vaccines.

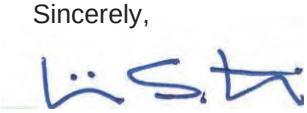
Due to the nature of Catalent Biologics' operation and the consumer health products they process, it is essential that they are able to expand and secure their facility at 1100 S. Strong Drive. The UDO establishes architectural standards for building design. It does not, however, address manufactured freezer units that we will work screen in an appropriate manor.

The UDO also limits the height and types of fences. Fences that are forward of the front building wall of the primary structure are limited to a height of four feet. This limitation impacts the northern portion of the campus, including the frontages along Allen Street and Strong Drive. Fence heights along other portions of the site are limited to 8 feet and barbed wire is not allowed. Per the U.S. Department of Health and Human Services, the Office of Security, Intelligence, and Information Management, and Operation Warp Speed, perimeter security fencing standards set the minimum fence height at six feet for facilities like Catalent Biologics. Catalent wants to keep the existing twelve foot fence with barbed wire on their west side for an added level of protection. However, due to its age and condition they would like to replace it.

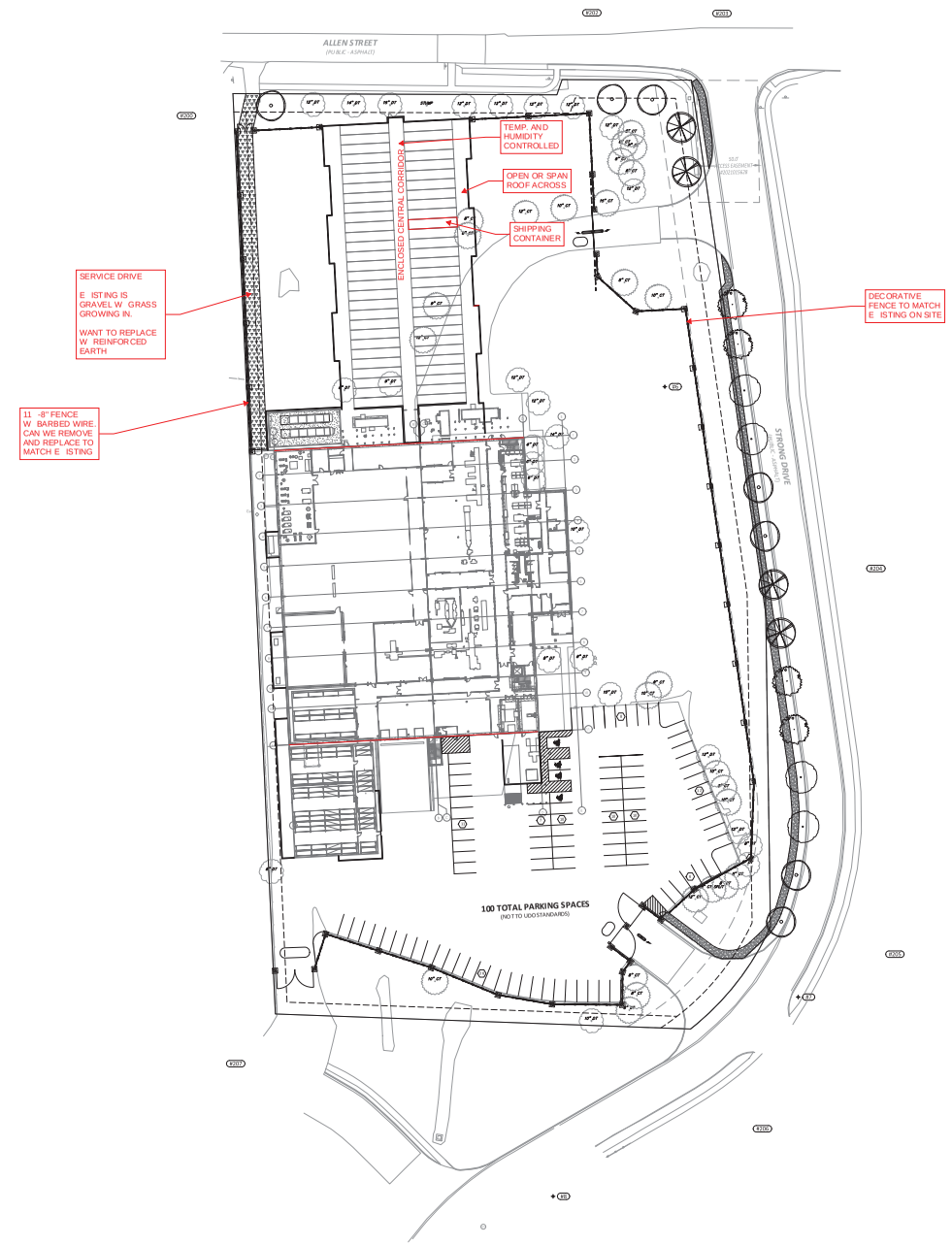
We believe that for each of the variances we are requesting the approval will not be injurious to the public health, safety, morals, and general welfare of the community; the use of value of the area adjacent to the Catalent property will not be affected in a substantially adverse manner; and the strict application of the terms of the UDO results in practical difficulties for the use of the property. These difficulties, including the need to screen the freezer units, secure the site, and expand the building footprint are peculiar to Catalent Biologics' manufacturing and distribution of COVID-19 vaccines. The variances we are seeking from the development standards will relieve those practical difficulties.

Your positive consideration of this request is greatly appreciated.

Sincerely,



William S. Riggert, PE



GENERAL NOTES

PLAN NOTES

40 0 40
SCALE: 1" = 40'

NORTH

LEGEND

- LIMITS OF NEW ASPHALT SIDEPATH
- LIMITS OF NEW 4" THICK CONCRETE PAVING
- PAVEMENT STRIPING 2' O.C.
- LIMITS OF ASPHALT PAVEMENT PATCH

MUSSETT NICHOLAS ASSOCIATES
ENGINEERS + ARCHITECTS
502 South West Street
Indianapolis, Indiana 46225
317.637.9241
5510 Six Forks Road
Raleigh, North Carolina 27609
919.783.4620

BRCJ
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-334-6277 www.brcjinc.com

BRCJ Project No: 10845

Certified by

BUILDING 'D' RENOVATIONS
PROJECT OSIRIS - CATALENT BIOLOGICS
BLOOMINGTON, INDIANA 47403

MARK	DATE	DESCRIPTION
REVISION BLOCK		

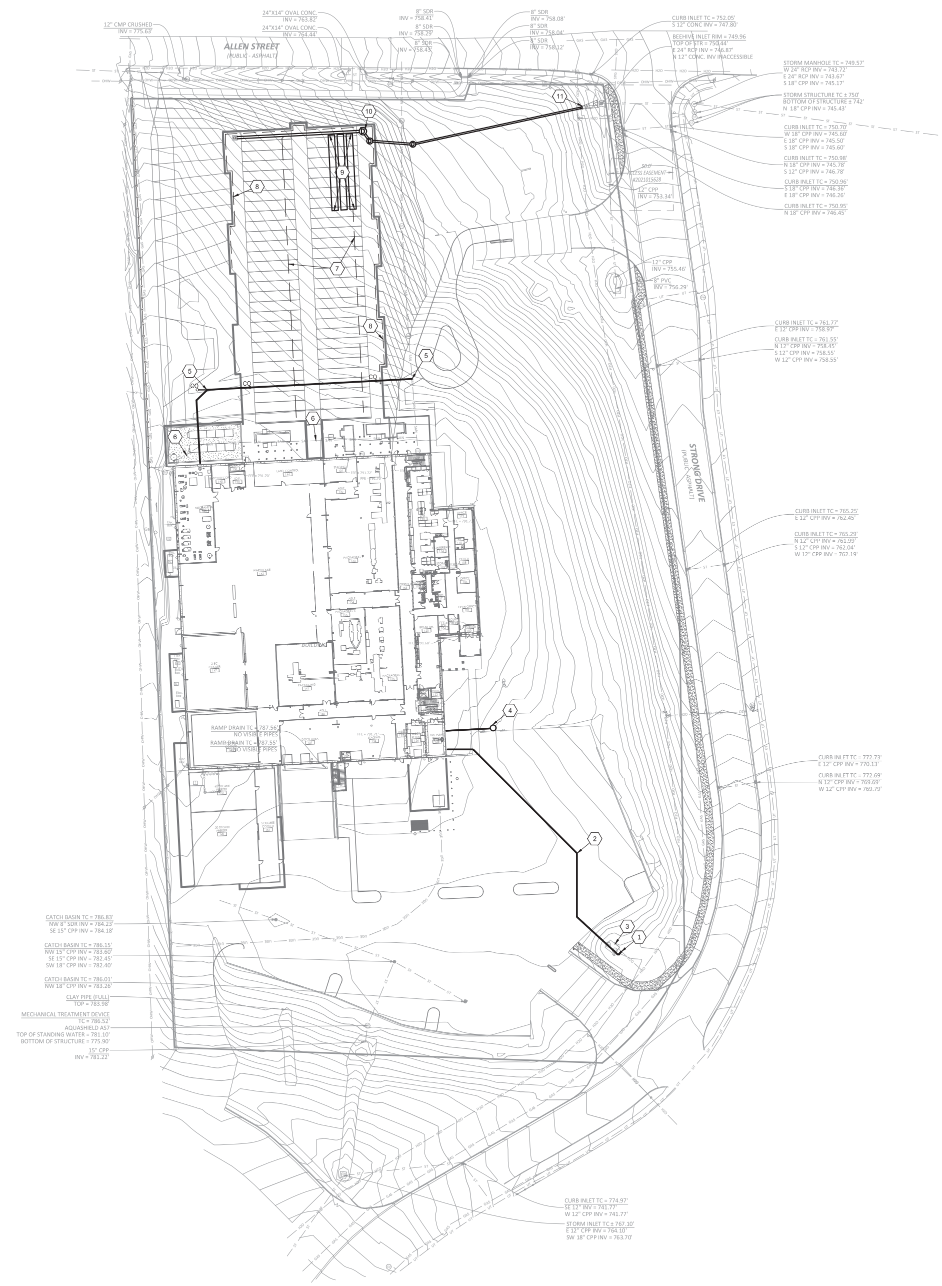
PROJECT NO:	202111
DATE	01.15.2022
DRAWN BY:	DLN
CHECKED BY:	WSR

SHEET TITLE:

SITE IMPROVEMENT PLAN

35

C401



GENERAL NOTES

PLAN NOTES

LEGEND

- CLEANOUT
- STORM DRAIN MANHOLE
- STORM DRAIN INLET

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

MUSSETT NICHOLAS ASSOCIATES
ENGINEERS + ARCHITECTS
502 South West Street
Indianapolis, Indiana 46225
317.631.9241
5510 Six Forks Road, Suite 270
Raleigh, North Carolina 27609
919.703.4028

Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYORS • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com
BRCJ Project No: 10845

Certified by

BUILDING 'D' RENOVATIONS
PROJECT OSIRIS - CATALENT BIOLOGICS
BLOOMINGTON, INDIANA 47403

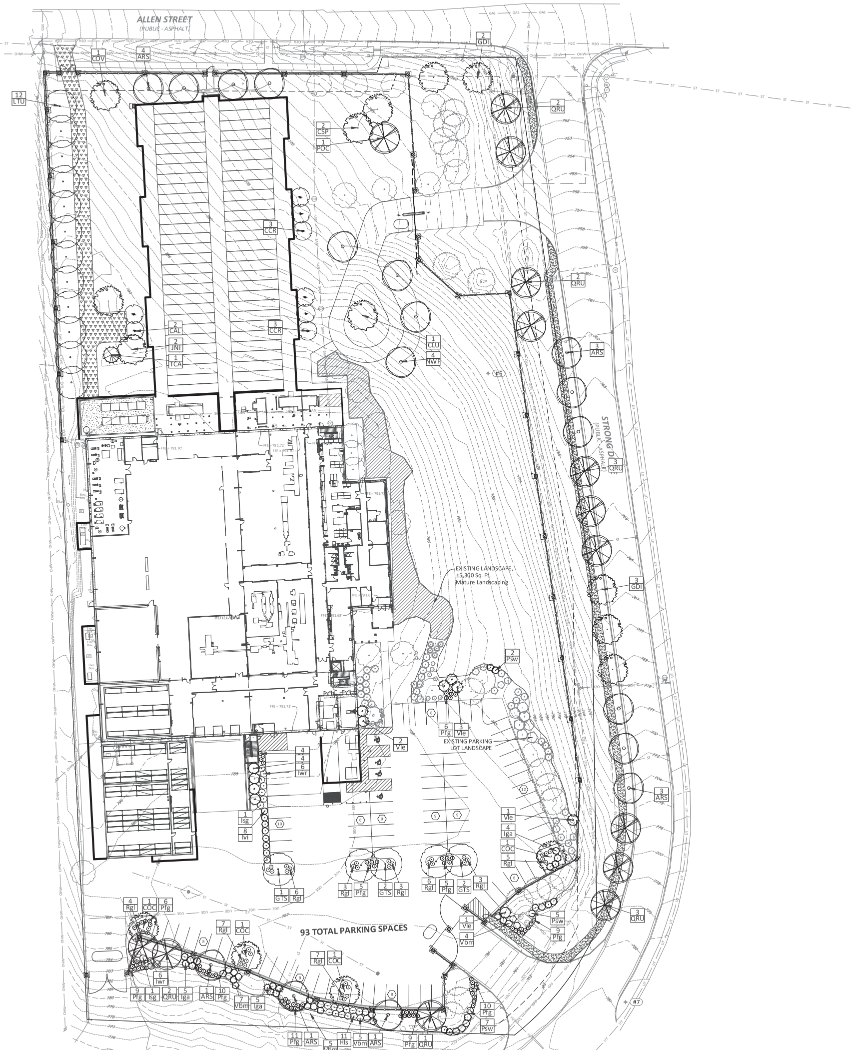
MARK	DATE	DESCRIPTION

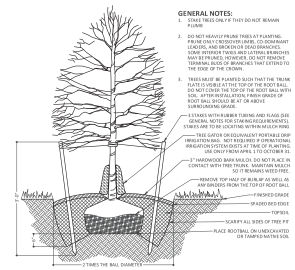
REVISION BLOCK

PROJECT NO:	2021111
DATE	01.25.2022
DRAWN BY:	AEK
CHECKED BY:	WSR

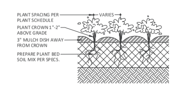
SHEET TITLE:
SITE UTILITIES PLAN

C601

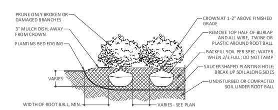




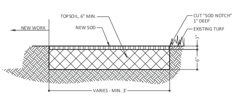
5 TREE PLANTING DETAIL



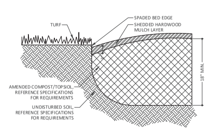
4 GROUNDCOVER PLANTING DETAIL



3 SHRUB PLANTING DETAIL



2 SOD NOTCH



1 PLANTING BED PREPARATION

PLANTING SCHEDULE

KEY	QUA.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	CONDITION
CANOPY TREES						
ARS	10	Acer rubrum 'Scarlet Sentinel'	Scarlet Sentinel Maple	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
[illegible]	1	[illegible]	[illegible]	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
COC	4	Celtis occidentalis	Hackberry	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
COV	1	Carya ovata	Shagbark Hickory	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
CSP	2	Catalpa speciosa	Northern Catalpa	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
GTS	4	[illegible]	[illegible]	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
GDI	3	Gymnocladus dioica	Kentucky Coffee Tree	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
JNI	2	Juglans nigra	Black Walnut	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
LTU	11	Liriodendron tulipifera	Tulip Tree	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
POC	1	Platanus occidentalis	Sycamore	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
NWF	4	Nyssa sylvatica 'Wild Fire'	Wildfire Blackgum	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
QRU	11	Quercus rubra	Red Oak	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
TCA	1	Tsuga Canadensis	Canadian or Eastern Hemlock	2" Caliper Min.	As shown	B&B, 6' Clear Trunk
ORNAMENTAL TREES						
CCA	4	Cercis canadensis	Eastern Redbud	6' Height Min.	As shown	B&B, Multistem
CAL	2	Cornus alternifolia	Pagoda Dogwood	6' Height Min.	As shown	B&B
SHRUBS						
HVL	11	[illegible]	[illegible]	3 Gal. Min.	5' O.C.	Container
Igl	14	Ilex glabra	Inkberry	3 Gal. Min.	5' O.C.	Container
Ivr	13	Ilex verticillata 'Winter Red'	Winter Red Winterberry	3 Gal. Min.	5' O.C.	Container
Isg	2	Ilex verticillata 'Southern Gentleman'	Southern Gentleman Winterberry	3 Gal. Min.	5' O.C.	Container
Ivi	8	Itea virginica	Virginia Sweetspire	3 Gal. Min.	5' O.C.	Container
Pwr	14	[illegible]	[illegible]	3 Gal. Min.	5' O.C.	Container
Pfg	44	Potentilla fruticosa 'Goldfinger'	Goldfinger Potentilla	3 Gal. Min.	5' O.C.	Container
Rgl	41	Rhus aromatica 'Gro Low'	Gro-Low Fragrant Sumac	3 Gal. Min.	42" on center	Container
Vbm	27	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood	3 Gal. Min.	5' O.C.	Container
Vle	11	Viburnum lentago	Nannyberry	3 Gal. Min.	5' O.C.	Container

GENERAL NOTES

A. THE CONTRACTOR SHALL LOCATE ALL UTILITIES AND VERIFY SITE CONDITION INFORMATION ON DRAWINGS PRIOR TO STARTING WORK AND PROMPTLY REPORT ANY DISCREPANCIES OR DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLAN TO THE DESIGNER AND OWNER. THE OWNER IS NOT RESPONSIBLE FOR UNAUTHORIZED CHANGES OR EXTRA WORK REQUIRED TO CORRECT UNREPORTED DISCREPANCIES.

B. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES AND CONDITIONS SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN ON THE LANDSCAPE PLAN. PLANT MATERIAL QUANTITIES SHOWN ON PLAN TAKE PRECEDENCE OVER THOSE IN THE PLANT LIST.

C. ALL PLANT MATERIAL SHALL CONFORM TO ANSI Z 60-1996 AND CURRENT ASSOCIATION OF AMERICAN NURSERYMEN STANDARDS. NO PARK GRADE MATERIAL SHALL BE ACCEPTED.

D. SPECIMEN SIZES INDICATED ON PLANT SCHEDULE ARE MINIMUM ACCEPTABLE SIZES. LARGER SPECIMENS MAY BE UTILIZED.

E. ALL PLANTING MASSES SHALL BE CONTAINED WITHIN MULCH BEDS AND RECEIVE 3" THICK SHREDDED HARDWOOD MULCH. ALL TREES OUTSIDE PLANTING BED AREAS SHALL RECEIVE A 5' MIN. DIAMETER MULCH RING AT BASE.

F. ALL LANDSCAPED AREAS NOT BARE MULCHED SHALL BE SEEDED OR SODDED AS INDICATED, UNLESS NOTED OTHERWISE. ALL OTHER AREAS DISTURBED, GRADED OR OTHERWISE MODIFIED BY NEW CONSTRUCTION SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH. SEE SPECIFICATIONS FOR SEEDING REQUIREMENTS.

G. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THE PLANT'S ORIGINAL GRADE PRIOR TO DIGGING. ALL PLANTS SHALL BE SET PLUMB. UNLESS NOTED OTHERWISE, IT IS THE CONTRACTOR'S OPTION TO STAKE TREES. HOWEVER, IT SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL THE END OF CONTRACTED GUARANTEE PERIOD.

H. ALL PLANTINGS SHALL BE WATERED DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. WATER THOROUGHLY TO ENSURE ALL AIR POCKETS ARE REMOVED AROUND ROOT BALL.

I. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING PLANT MATERIAL UNTIL TIME OF ACCEPTED ESTABLISHMENT.

J. ALL PLANTING BED EDGES TO BE SPADE CUT UNLESS SPECIFIED WITH MOW STRIP OR OTHER INSTALLED EDGING.

K. PLACE BIODEGRADABLE STRAW BLANKET NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL ON SLOPES OF OR EXCEEDING 3:1 OR AS OTHERWISE INDICATED OR DIRECTED BY ENGINEER.

L. COORDINATE LANDSCAPE PLAN WITH ALL WATER QUALITY AND EROSION CONTROL MEASURES.

M. IF OWNER REQUESTS, PLANTS SHALL BE STAKED AND/OR FIELD-LOCATED BY DESIGNER AND CONTRACTOR. FINAL LOCATIONS OF TREES SHOULD BE ADJUSTED IF NEEDED TO AVOID OVERHEAD AND UNDERGROUND UTILITIES.

N. ANY PLANT MATERIAL SUBSTITUTIONS INSTALLED WITHOUT APPROVAL FROM DESIGNER AND/OR OWNER SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

O. ALL PLANTING MATERIALS, REGARDLESS OF SIZE SPECIFIED, SHALL BE OF SIZES THAT COMPLY WITH CITY OF BLOOMINGTON UDO LANDSCAPING STANDARDS.

P. NO HEAVY MACHINERY/EQUIPMENT SHALL BE USED WITHIN ROOT ZONES OF EXISTING TREES THAT ARE TO REMAIN, EXCEPT WERE DISTURBANCE IS INDICATED. CONTRACTOR SHALL ENSURE EXISTING TREES TO REMAIN ARE PROTECTED AND FULLY PRESERVED DURING THE CONSTRUCTION/GRADING PROCESS.

PLAN NOTES 1

1. SOD OVER 6" OF TOPSOIL TO COVER GRADED AREA. NOTCH SOD AT INTERFACE WITH EXISTING TURF TO MATCH ELEVATION.
2. SEED AND MULCH OVER 6" OF TOPSOIL TO COVER GRADED AND DISTURBED AREAS - REFER TO SPECIFICATIONS

LANDSCAPE CALCULATIONS

DIMENSIONAL STANDARDS
[illegible] SQ FT — LOT AREA
[illegible] SQ FT — LANDSCAPE AREA [illegible]

STREET TREES
TOTAL STREET FRONTAGE = [illegible] — MIN. [illegible] TREES [illegible]

PARKING LOT PERIMETER
93 TOTAL SPACES [illegible] — MIN. [illegible] TREES [illegible]
93 TOTAL SPACES [illegible] — MIN. [illegible] SHRUBS [illegible]

PARKING LOT ISLANDS
PROVIDED FOR EVERY 10 SPACES — MIN. 9 TREES

INTERIOR PLANTING
[illegible] ACRES LANDSCAPE AREA — MIN. [illegible] CANOPY TREES [illegible]; MIN. [illegible] EVERGREEN [illegible]; MIN. 8 ORNAMENTAL TREES; 0 SHRUBS [illegible]

BUFFER YARDS
TYPE [illegible] BUFFER YARD ALONG ADJACENT MULTI-FAMILY — MIN. 12 TREES (EVERY 20'); 6' TALL OPAQUE FENCE

Indiana 811
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

LEGEND

1 / GB — PLANT QUANTITY/KEY

MUSSETT NICHOLAS ASSOCIATES
ENGINEERS + ARCHITECTS
502 South West Street
Indianapolis, Indiana 46225
317.631.9241
5510 Six Forks Road, Suite 270
Raleigh, North Carolina 27609
919.703.4028

Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYORS • CIVIL ENGINEERS • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com
BRCJ Project No: 10845

Certified by

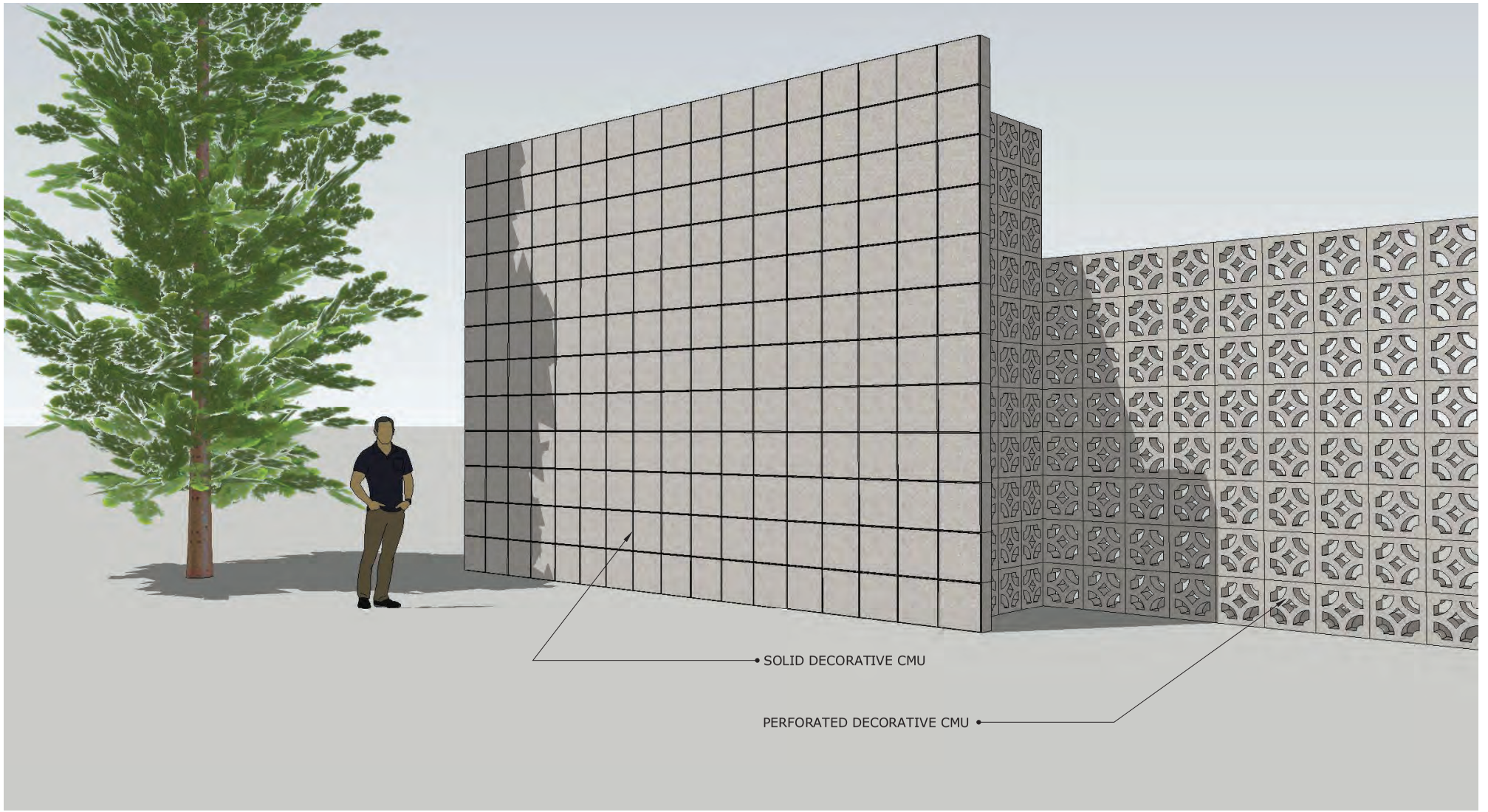
BUILDING 'D' RENOVATIONS
PROJECT OSIRIS - CATALENT BIOLOGICS
BLOOMINGTON, INDIANA 47403

MARK	DATE	DESCRIPTION
REVISION BLOCK		

PROJECT NO: 2021111
DATE: 01.26.2022
DRAWN BY: LPS
CHECKED BY: WSR

SHEET TITLE:
SITE LANDSCAPE PLAN

C701

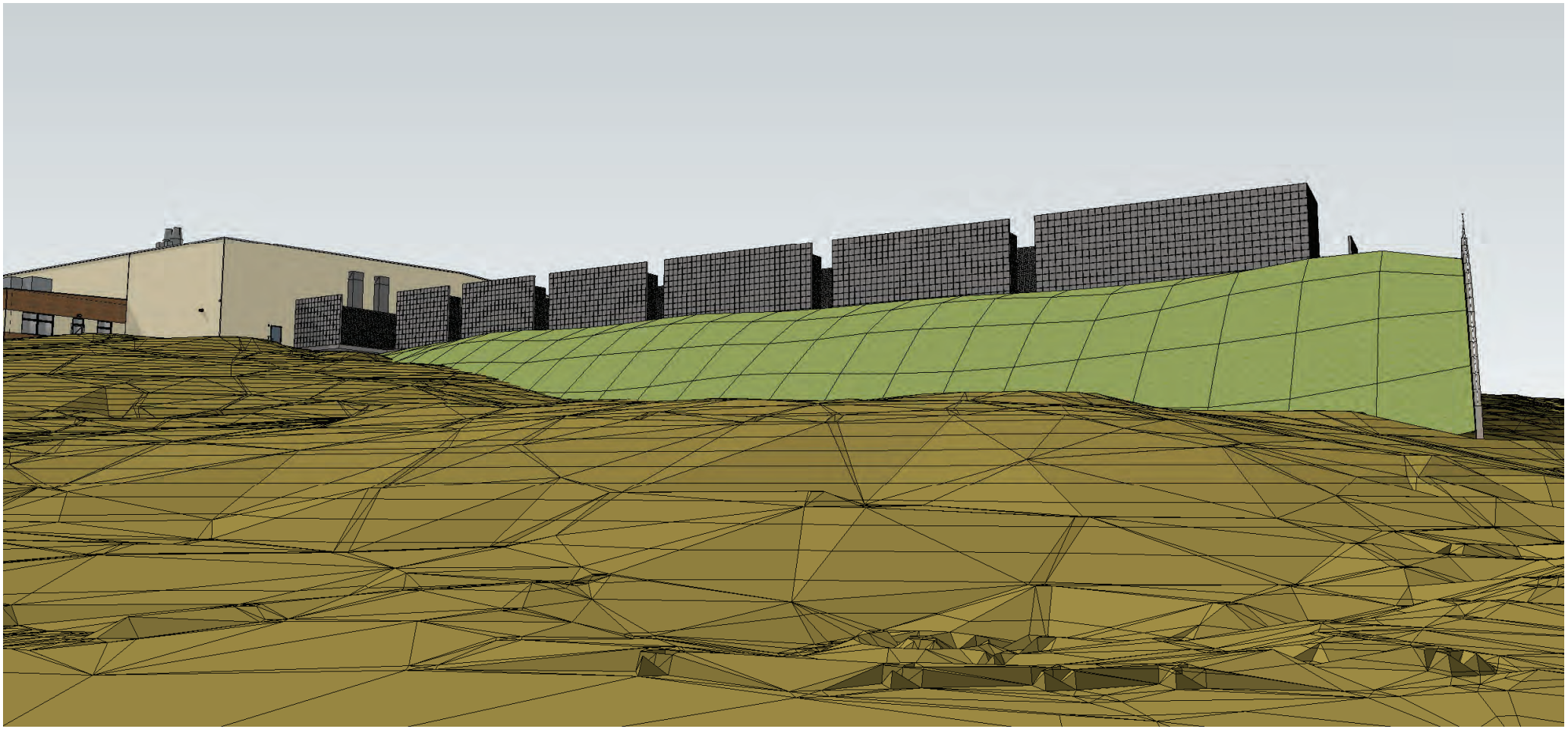


Mussett Nicholas and Associates

January 18, 2022

Option 6

Catalent Biologics Bldg. D Screen Wall

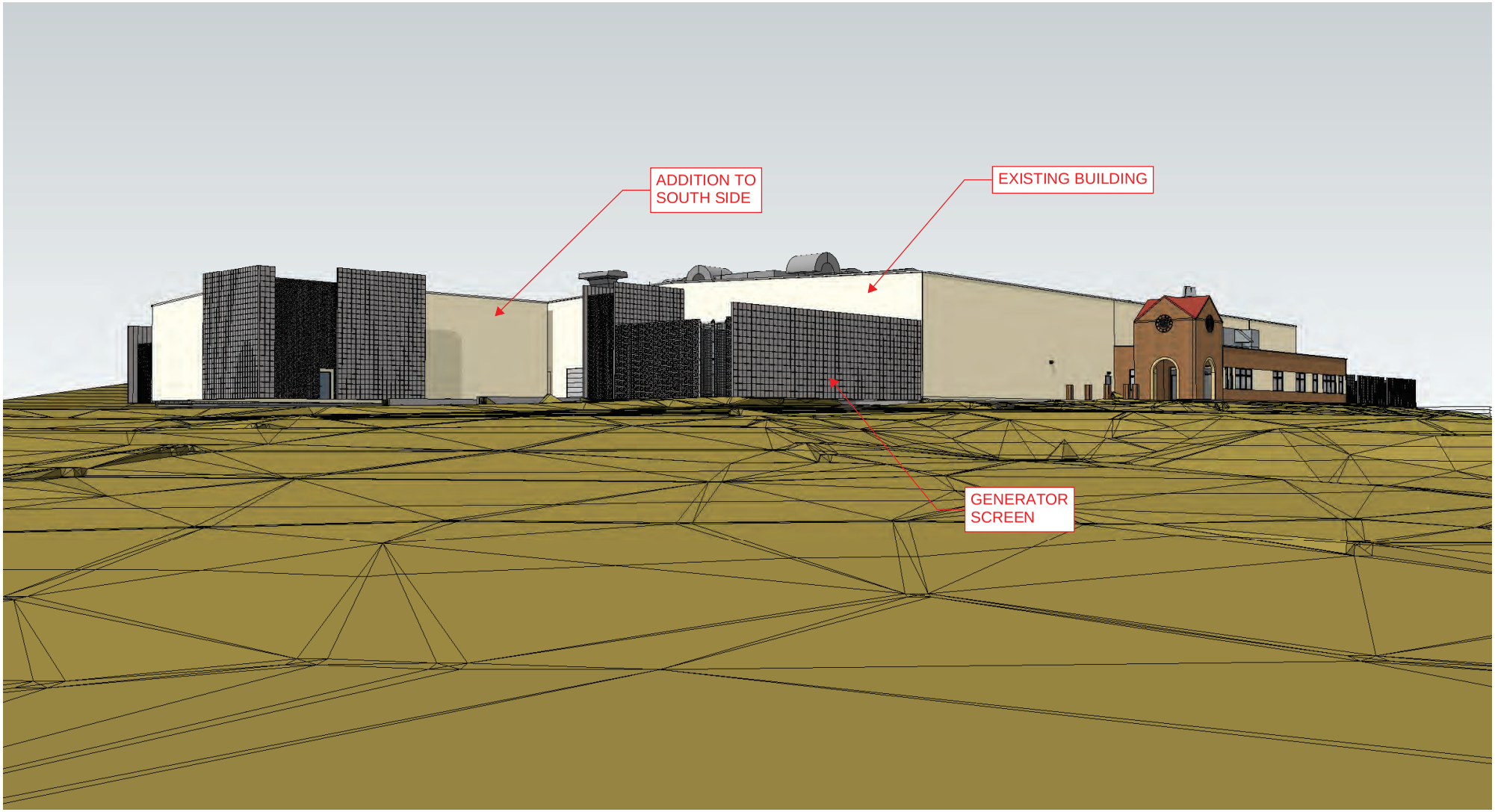


Mussett Nicholoas + Associates

January 18, 2022

View from Corner of Allen & Strong

Catalent Pharma Solutions Bldg. D Screening

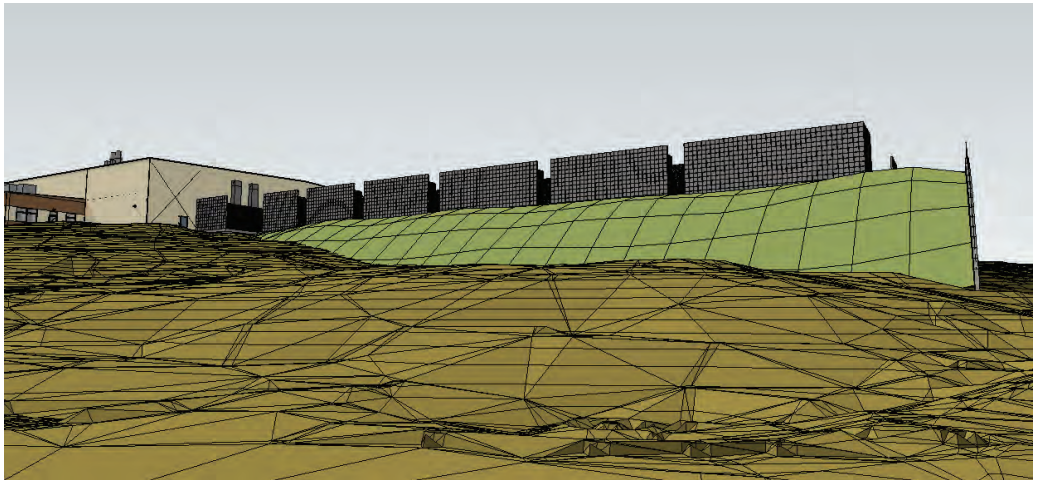


Mussett Nicholoas + Associates

January 18, 2022

View from Corner of Allen & Strong

Catalent Pharma Solutions Bldg. D Screening



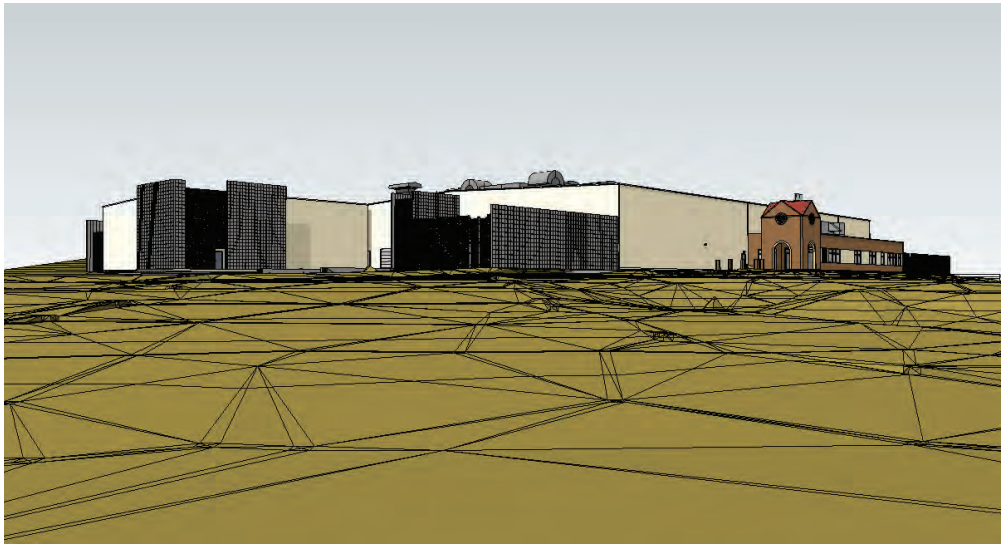
Mussett Nicholoas + Associates

January 18, 2022

View from Corner of Allen & Strong

Site Context Comparison

Catalent Pharma Solutions Bldg. D Screening



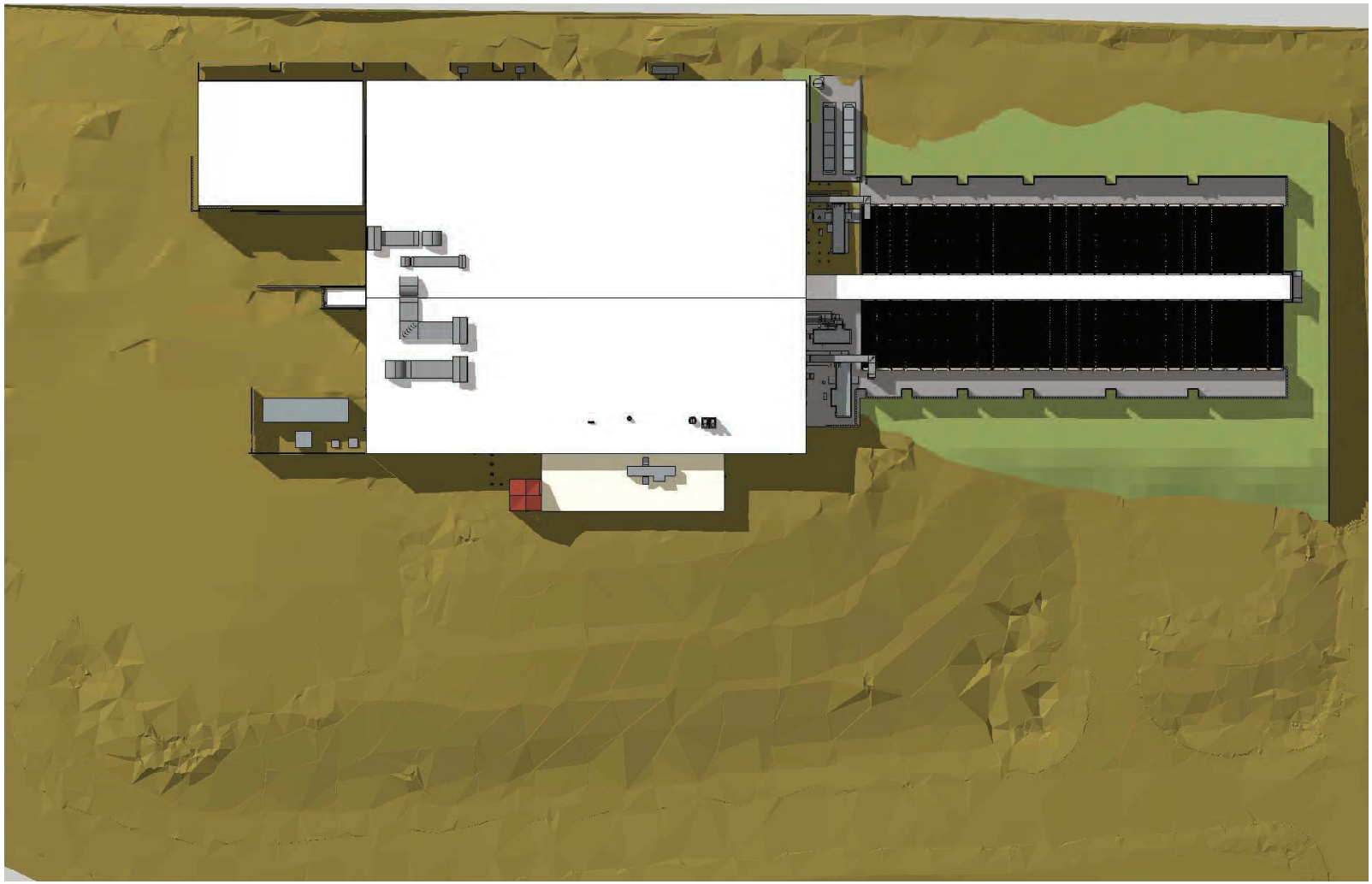
Mussett Nicholoas + Associates

January 18, 2022

View from Corner of Allen & Strong

Site Context Comparison

Catalent Pharma Solutions Bldg. D Screening

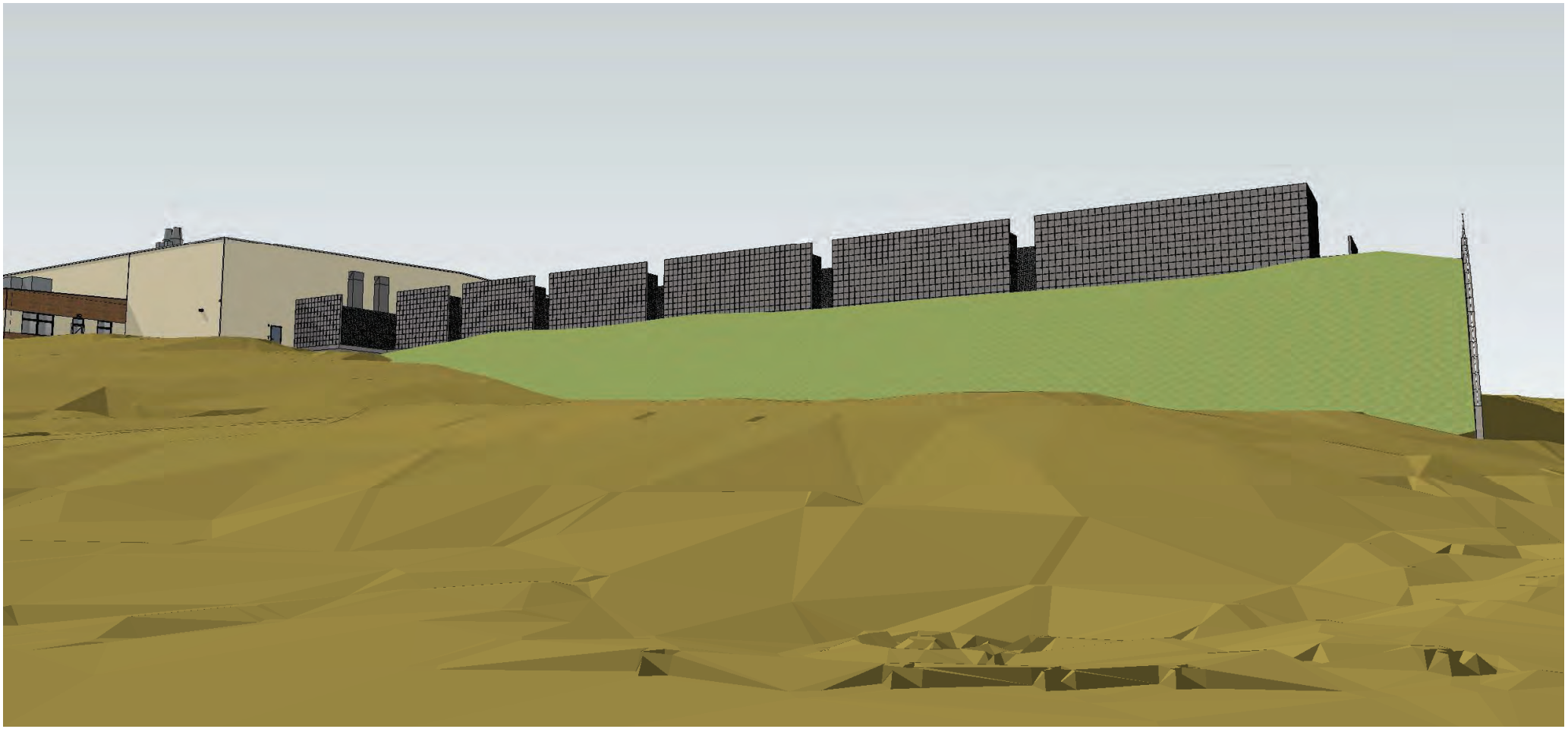


Mussett Nicholoas + Associates

January 20, 2022

Plan View

Catalent Pharma Solutions Bldg. D Screening

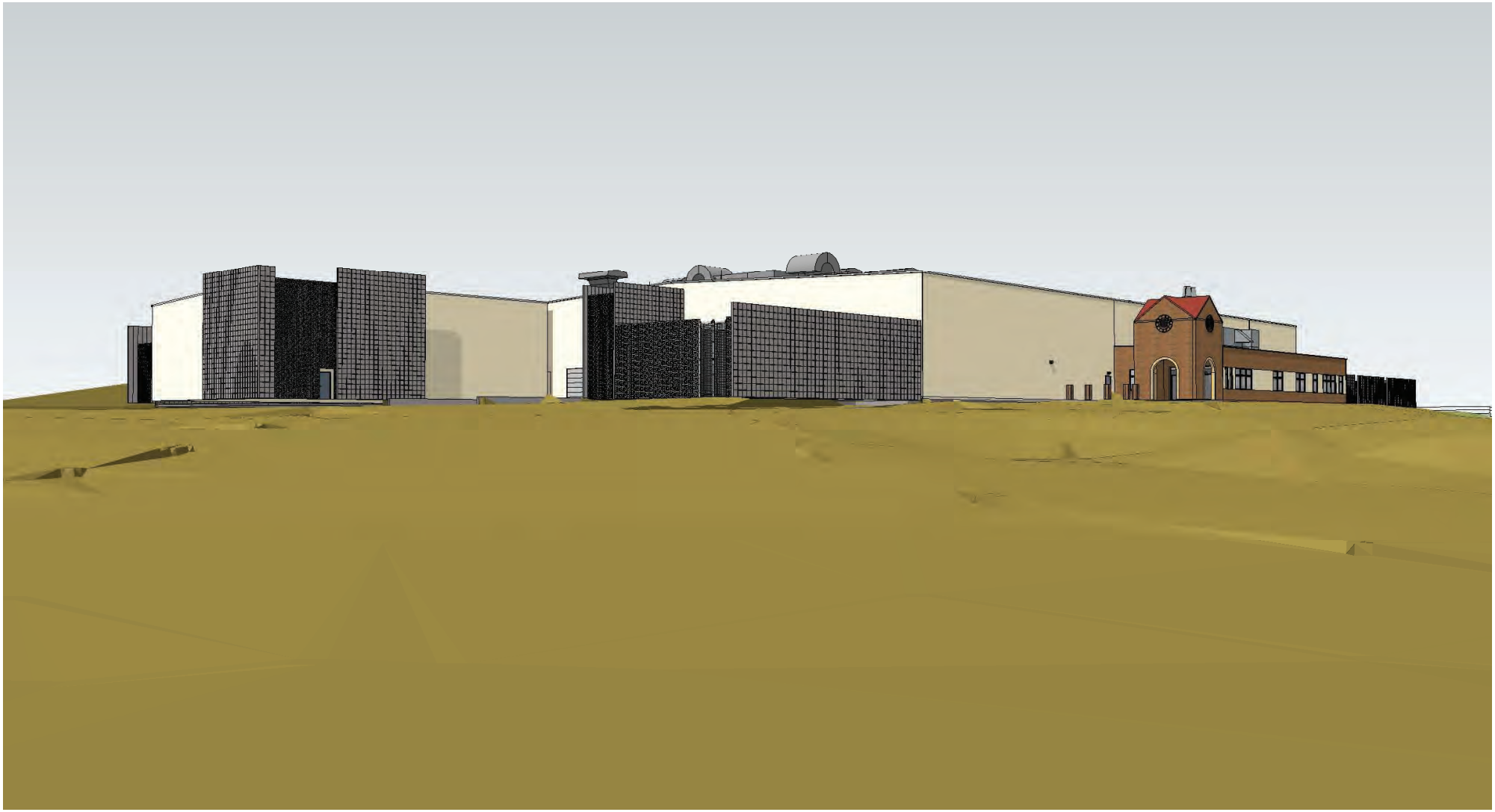


Mussett Nicholoas + Associates

January 20, 2022

View from Corner of Allen & Strong

Catalent Pharma Solutions Bldg. D Screening

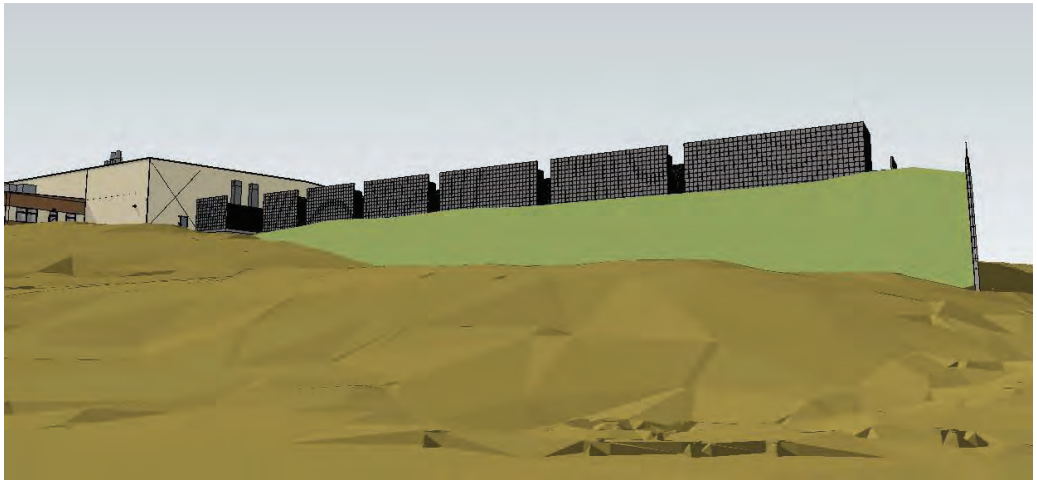


Mussett Nicholoas + Associates

January 20, 2022

View from Corner of Allen & Strong

Catalent Pharma Solutions Bldg. D Screening



Mussett Nicholoas + Associates

January 20, 2022

View from Corner of Allen & Strong

Site Context Comparison

Catalent Pharma Solutions Bldg. D Screening

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January 20, 2022

View from Corner of Allen & Strong

Site Context Comparison

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