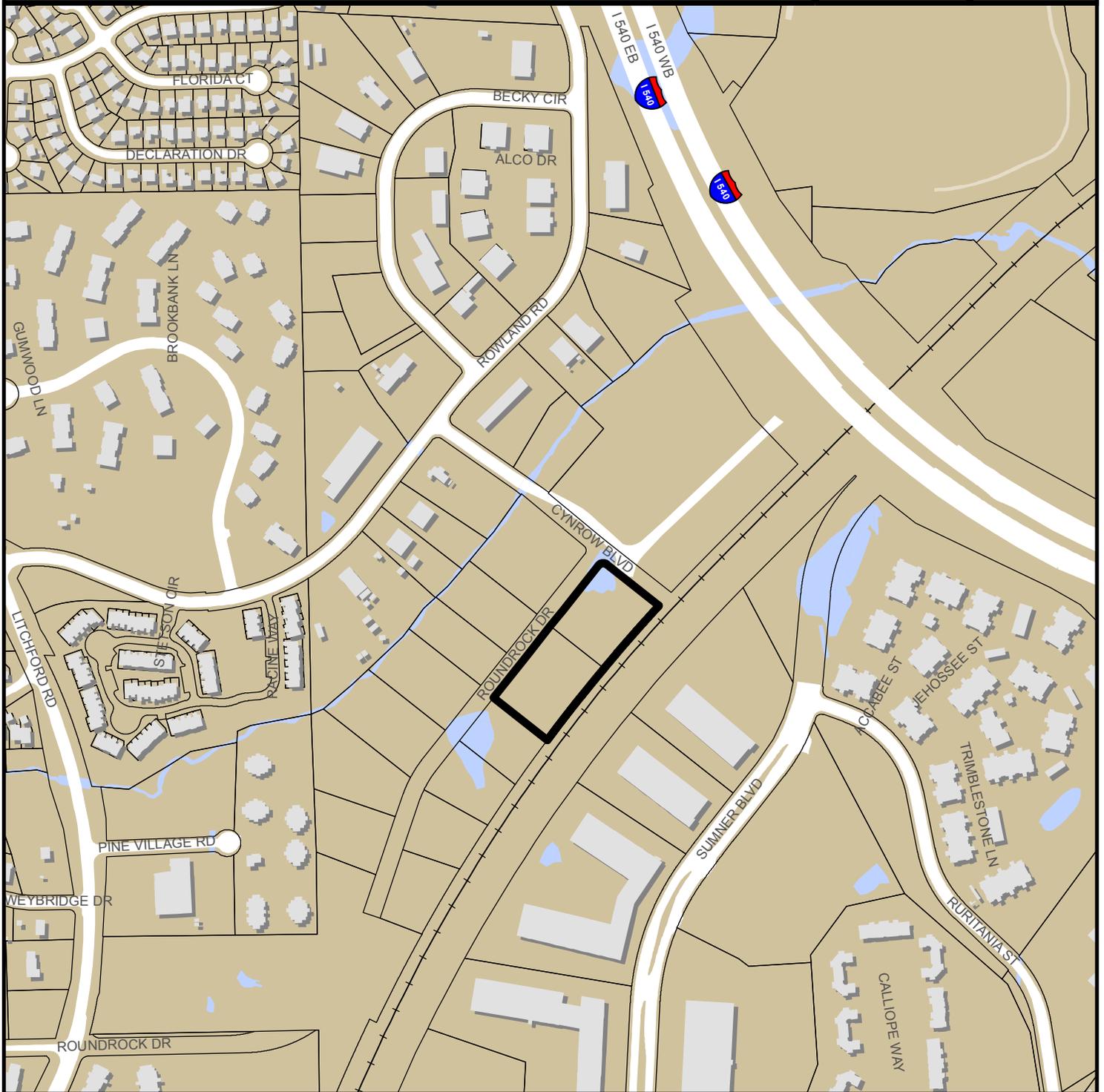


# INNOVATIVE FABRICATION SR-15-2017



0 300 600 1,200 Feet

Zoning: **IX-3 w/SHOD-1**

CAC: **North**

Drainage Basin: **Perry Creek**

Acreage: **3.16**

Sq. Ft.: **16,638**

Planner: **Michael Walters**

Phone: **(919) 996-2636**

Applicant: **Michael Yarur**

Phone: **(919) 449-0571**





# Administrative Action

## Administrative Site Review

City of Raleigh  
Development Plans Review Center  
One Exchange Plaza  
Raleigh, NC 27602  
(919) 996-2626  
www.raleighnc.gov

**Case File / Name:** SR-15-17, Innovative Fabrication

**General Location:** This site is located on the southeast corner of the intersection of Cynrow Blvd. and Roundrock Drive, and is within the city limits.

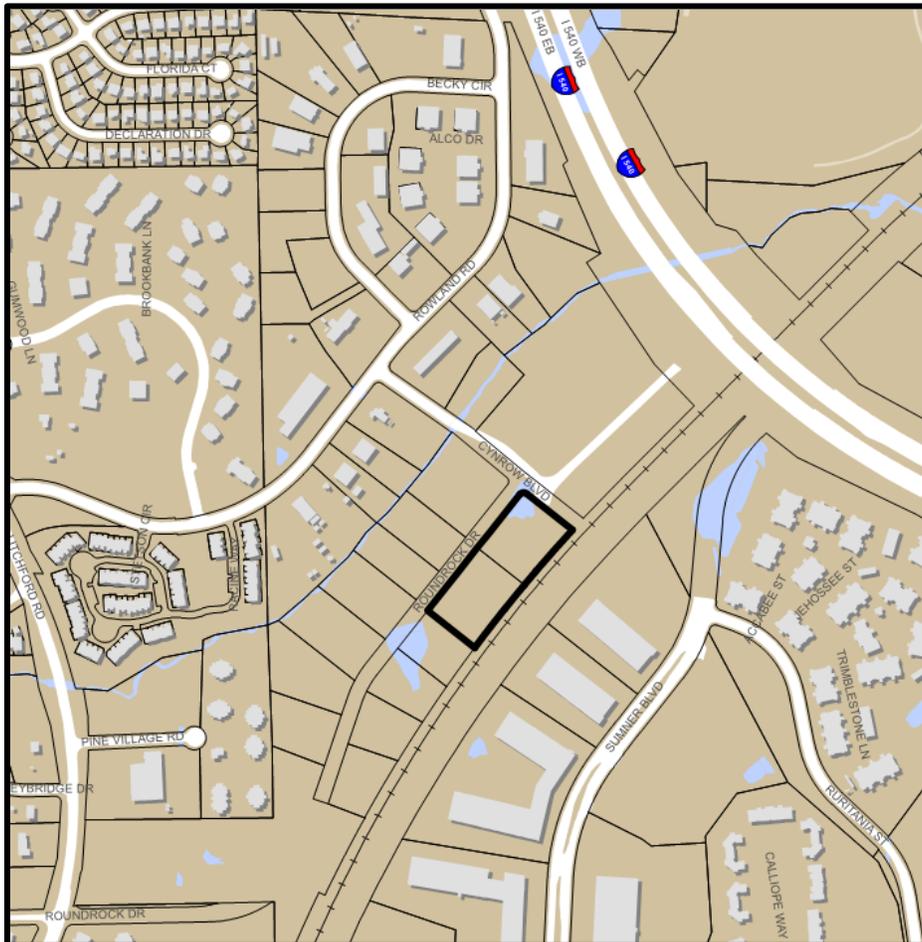
**CAC:** North

**Request:** The 4,878 square foot 19' tall expansion of an existing 11,760 square foot one story flex warehouse building, all on a 2.1 acre tract zoned IX-3.

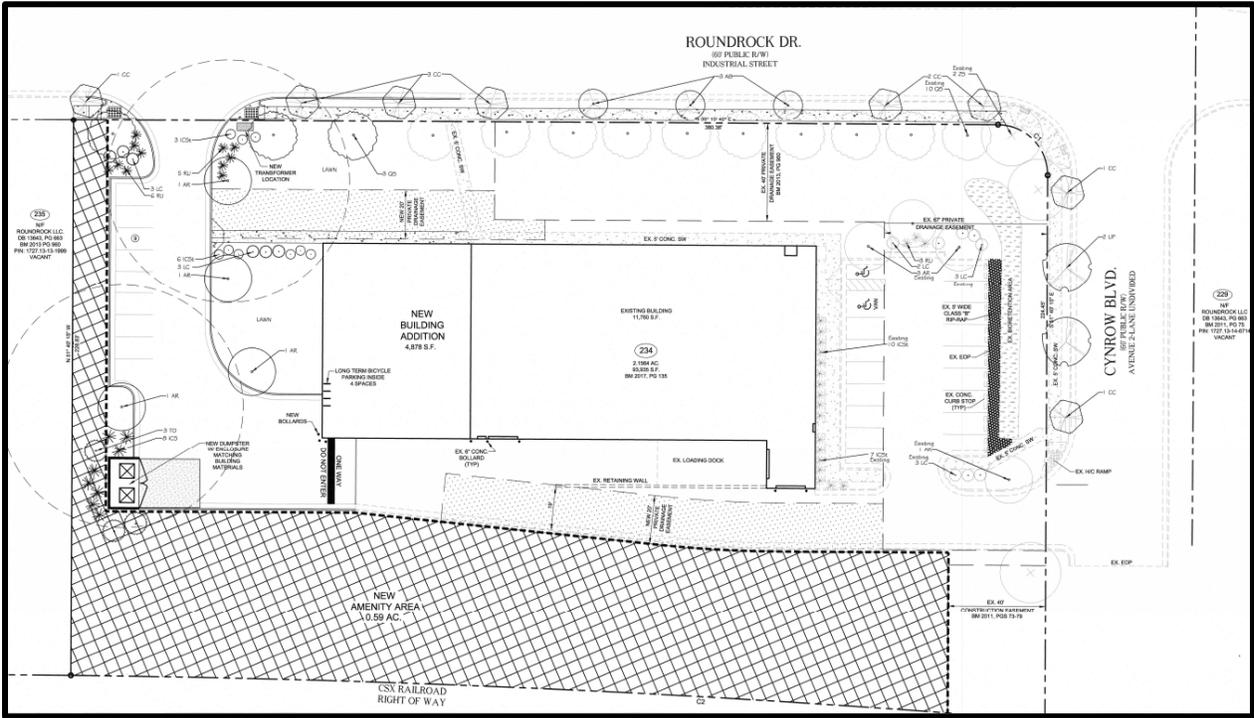
**Cross-Reference:** TR# 502574

One Design Adjustment has been approved by the Public Works Director for this project, noted below.

1. Allowance of an alternative streetscape cross section. (3.5' planting strip between back of curb and 5' existing and proposed 5' sidewalk)



SR-15-17 Location Map



SR-15-17 Preliminary Site Plan

# Design Adjustment Staff Response



**DEVELOPMENT  
 SERVICES  
 DEPARTMENT**

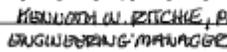
Development Services Customer Service Center | Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2495  
 Litchford Satellite Office | 8320 - 130 Litchford Road | Raleigh, NC 27601 | 919-996-4200

Per Section 10.2.18.C of the Unified Development Ordinance, the Development Services Director, or designee, shall consult with the heads of other City Departments regarding the review of the request. The Development Services Director, or designee, shall approve, approve with conditions or deny the request, but must do so within 60 days of the receipt of a completed application. Additional time may be necessary if a municipal or state entity is incorporated in the review process or if a detailed engineering study is submitted in conjunction with the request.

<b>PROJECT</b>	Project Name	Innovative Fabrication	Date completed Application received	5/25/2017
	Case Number	SR-15-2017	Transaction Number	502574

<b>DEPARTMENT RESPONSE/RECOMMENDATION</b>	Staff <b>SUPPORTS</b> the Design Adjustment based upon the findings in these applicable code:																				
	<input type="checkbox"/> UDO Art. 8.3 Blocks, Lots, Access		<input type="checkbox"/> UDO Art. 8.4 New Streets																		
	<input checked="" type="checkbox"/> UDO Art. 8.5 Existing Streets		<input type="checkbox"/> Raleigh Street Design Manual																		
		<input type="checkbox"/> Other																			
<table border="1"> <thead> <tr> <th>DEPARTMENT</th> <th>REPRESENTATIVE SIGNATURE</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Dev. Services Planner</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Development Engineering</td> <td>Cadell Hill <i>[Signature]</i></td> </tr> <tr> <td><input type="checkbox"/> Engineering Services</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Public Utilities</td> <td></td> </tr> </tbody> </table>		DEPARTMENT	REPRESENTATIVE SIGNATURE	<input type="checkbox"/> Dev. Services Planner		<input checked="" type="checkbox"/> Development Engineering	Cadell Hill <i>[Signature]</i>	<input type="checkbox"/> Engineering Services		<input type="checkbox"/> Public Utilities		<table border="1"> <thead> <tr> <th>DEPARTMENT</th> <th>REPRESENTATIVE SIGNATURE</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> City Planning</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Transportation</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> PRCR</td> <td>Zach Mince <i>[Signature]</i></td> </tr> </tbody> </table>		DEPARTMENT	REPRESENTATIVE SIGNATURE	<input type="checkbox"/> City Planning		<input type="checkbox"/> Transportation		<input checked="" type="checkbox"/> PRCR	Zach Mince <i>[Signature]</i>
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<input checked="" type="checkbox"/> PRCR	Zach Mince <i>[Signature]</i>																				
<b>Findings:</b> Staff supports the requested design adjustment for right-of-way dedication, streetscape and the 5' general utility easement. This industrial subdivision was approved under the previous development code and there were individual site plans that were also approved that have set the precedent for the right-of-way infrastructure. The existing street section is consistent with the new street classification, but the precedent of the previous standard 3.5' planting strip and 5' sidewalk is accompanied within the existing 60' right-of-way. Additionally, the existing nature of the development has private utilities established in the right-of-way and thus negates the need for the 5' general utility easement. Additionally, to comply with the intent of the new streetscape requirements, smaller maturing street trees will be planted within the 3.5' planting strip.																					

Development Services Director or Designee Action: Approve  Approval with Conditions  Deny

  
 Authorized Signature KENNETH W. RITCHIE, PE Date 5/25/2017  


\*The Development Services Director may authorize a designee to sign in his/her stead. Please print name and title next to signature.

<b>CONDITIONS</b>	
-------------------	--

Appeal of the decision from the Development Services Director, or his or her designee, shall be made in writing within 30 days to the Board of Adjustment (see Section 10.2.18.C3b).

<b>Code Conformance:</b>		<b>Code Section(s)</b>
<b>Zoning District:</b>	IX-3	<a href="#">3.1</a>
<b>Overlay District:</b>	SHOD-2	<a href="#">5.1</a>
<b>Parking:</b>	Required 1sp/600 sf ( 9,000 sf office) + 1 sp/3,000 sf ( 7, 638 sf indoor area) = 18 spaces Proposed = 27 spaces  Bicycle - 1sp/40,000 sf gross floor area (min. 4) long term spaces Proposed = 4	<a href="#">7.1.2</a>
<b>Street Type(s):</b>	Roundrock Drive – Industrial Street (60’R/W) Cynrow Blvd - Avenue 2-Lane, undivided, (60’R/W)  Proposed = new 5’ sidewalk along Roundrock entire frontage of Roundrock = New 30” curb and gutter from the existing drive to the southwest end of the parcel (the area of expansion)	<a href="#">8.4</a>
<b>Streetscape:</b>	Proposed are new street trees inside the right of way along the frontages of both Roundrock Drive and Cynrow Blvd.  A Public Works design adjustment was approved allowing an alternative streetscape cross section. (3.5’ planting strip between back of curb and 5’ existing and proposed 5’ sidewalk.) along both Roundrock Drive and Cynrow Blvd.	<a href="#">8.5</a>
<b>Setbacks/Frontage:</b>	Front = 3’ Corner = 3’ Rear = 0’ or 6’	<a href="#">3.2,</a>
<b>Neighborhood Transitions:</b>	NA	<a href="#">3.5</a>
<b>Transitional Protective Yards:</b>	NA (as per light industrial use)	<a href="#">7.2.4</a>
<b>Stormwater:</b>	This project is proposing to expand parcel area via recombination (T# 497751).The expanded managed open space along with the previously constructed bioretention and previously purchased buydown credits are sufficient for Nitrogen reduction compliance. An additional pipe detention system (west) along with the previously constructed pipe detention system (east) will be used to attenuate peak runoff rates for the 2 & 10 yr.storm events to predevelopment conditions.	<a href="#">9.2</a>
<b>Tree Conservation:</b>	There exists no trees on site which meet or exceed the requirements of section 9.1 of the UDO thus no establishment of tree conservation is required.	<a href="#">9.1</a>

<p><b>Variations, Design Adjustments, Administrative Alternates:</b></p>	<p>One Design Adjustment has been approved by the Public Works Director for this project being, allowing an alternative streetscape cross section. (3.5' planting strip between back of curb and 5' existing and proposed 5' sidewalk)</p>	
<p><b>Other:</b></p>	<p>NA</p>	

**OFFICIAL ACTION: Approval with conditions**

**CONDITIONS OF APPROVAL:**

**Prior to issuance of a mass land disturbing permit for the site:**

1. That in accordance with Part 10A Section 9.4.4, a surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City;

**Prior to the issuance of any site permits, infrastructure construction plans or concurrent review process, whichever is applicable:**

2. That a stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved by the Stormwater Engineer in compliance with Part 10A Chapter 9 of the Unified Development Ordinance, including the designation of buffer areas and open space areas for stormwater purposes prior to grading or the approval of construction drawings whichever event comes first;

**Prior to issuance of building permits:**

3. That a fee in lieu for 1' of sidewalk width along both Roundrock Drive and Cynrow Blvd frontages is paid to the city;
4. That in accordance with Part 10A Section 8.1.3, a surety equal to 125% of the cost of development related improvements, 5' sidewalks for the frontage length of Roundrock Dr, and including streetscape trees on along the frontage of Roundrock Drive and Cynrow Blvd. is paid to the Public Works Department;
5. That a tree impact permit are obtained from the City of Raleigh;
6. That in accordance with Part 10A Section 9.2.2, a surety equal to 125% of the cost of construction of a stormwater device shall be paid to the City;
7. That the developer shall pay to the City a stormwater facility replacement fund payment equal to twenty-four percent (24%) of the estimated cost of constructing all stormwater control facilities shown on the development plans;

**Prior to issuance of building occupancy permit:**

8. That in accordance with Part 10A Section 9.2.2, an as-built plan and certification any stormwater control device shall be reviewed and accepted by the City prior to final stormwater inspection approval or certificate;

---

I hereby certify this administrative decision.

Signed: (Planning Dir.) Kenneth Brauer Date: 6/22/17  
(BT)

Staff Coordinator: Michael Walters

SEE LAST PAGE FOR IMPORTANT INFORMATION ON THE NEXT STEP IN THE PROCESS.

---

**FINDINGS:** City Administration finds that this request, with the above conditions being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan dated March 2017, submitted by Johnny Edwards, JAECO.

---

**EXPIRATION DATES:** The expiration provisions of UDO Section 10.2.8 E, including the ability to request extensions in the expiration date, apply to this site plan. If significant construction has not taken place on a project after administrative site review approval, that approval may expire and be declared void, requiring re-approval before permits may be issued. To avoid allowing this plan approval to expire the following must take place by the following dates:

**3-Year Expiration Date:** 6/22/2020

Obtain a valid building permit for the total area of the project, or a phase of the project.

**4-Year Completion Date:**

Within four years after issuance of the first building permit for the site plan, the construction of the entire site plan must be completed unless an applicant has been granted vested rights. Failure to complete construction within this specified time frame shall automatically void the approved site plan for which no building permits have been issued.

**WHAT NEXT?:**

- MEET ALL CONDITIONS OF APPROVAL.
- COMPLETE INFRASTRUCTURE CONSTRUCTION DRAWINGS FOR ANY PUBLIC IMPROVEMENTS Streets, Utility lines to be owned and maintained by the City.
- HAVE A REGISTERED SURVEYOR PREPARE FINAL PLATS FOR RECORDING. These also must be submitted to the City for authorization signature prior to recording with the Wake County Register of Deeds.
- MEET THE REQUIREMENTS OF THE EXPIRATION THRESHOLDS AS NOTED ABOVE.





**JOHN A. EDWARDS & COMPANY**  
Consulting Engineers  
and Land Surveyors

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Fax: (919) 828-4711  
E-mail: info@jaeco.com

www.jaeco.com

**INNOVATIVE  
FABRICATION**

Client:  
**MCN HOLDINGS, LLC**  
1730 ROUNDROCK DR.  
RALEIGH, NC 27615

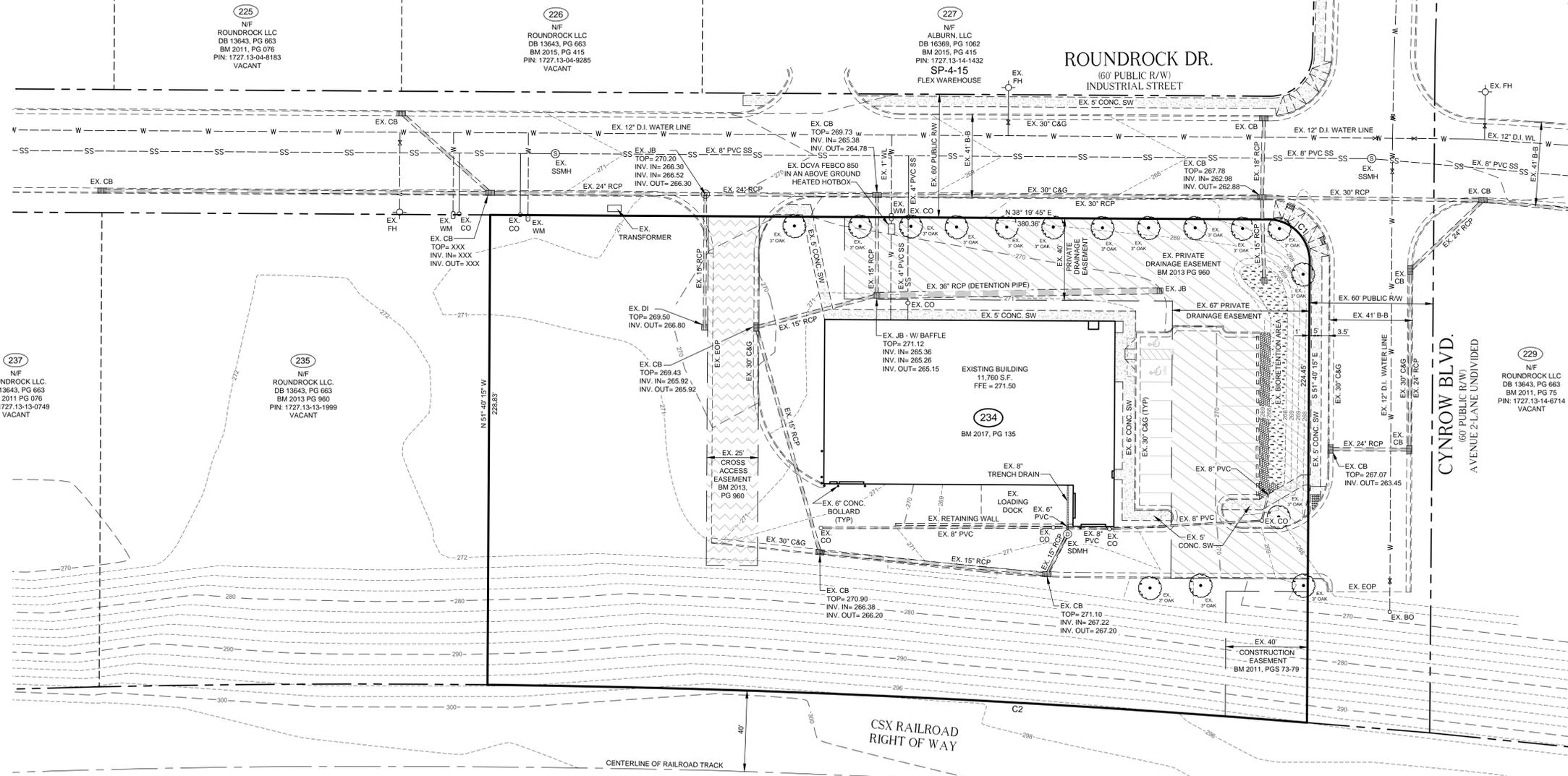
Approvals:  
**SITE DATA**  
OWNER: MCN HOLDINGS, LLC  
1730 ROUNDROCK DR.  
RALEIGH, NC 27615  
ADDRESS: 1730 ROUNDROCK DR.  
RALEIGH, NC 27615  
PIN: ...  
LOT AREA: 93,934.8463 SF (2.1564 AC)  
ZONING: IX-3  
CURRENT LAND USE: FLEX WAREHOUSE  
REFERENCE: DB 15541, PG 912  
BM 2013, PG 960  
BM 2017, PG 135  
WAKE COUNTY REGISTRY

ALL CONSTRUCTION SHALL BE IN  
ACCORDANCE WITH CITY OF RALEIGH  
AND / OR NCDOT STANDARDS AND  
SPECIFICATIONS.

Drawing Title: **EXISTING  
CONDITIONS**

Revisions		
Number	Description	Date

Drawing Scale: 1" = 30'  
Drawn By: JCB / BF  
Checked By: JAE, JR.  
Date Issued: 03/10/17

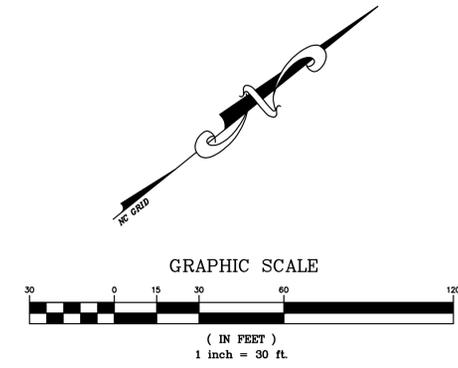


**LEGEND**

BM BOOK OF MAPS	MH MANHOLE	CONCRETE	PROPERTY LINE
DB DEED BOOK	WL WATER LINE	EX. WATER VALVE	RIGHT-OF-WAY LINE
PG PAGE	WM WATER METER	EX. FIRE HYDRANT	LOT LINE
R/W RIGHT-OF-WAY	WV WATER VALVE	EX. WATER METER	EASEMENT LINE
AC ACREAGE	WS WATER SERVICE	EX. SANITARY SEWER MANHOLE	EXISTING WATER LINE
S.F. SQUARE FEET	BO BLOWOFF	EX. SANITARY SEWER CLEANOUT	EXISTING SANITARY SEWER
EIP EXISTING IRON PIPE	FL FIRE LINE	EX. STORM CATCH BASIN	EXISTING STORM DRAINAGE
IPS IRON PIPE SET	HC HANDICAP	EX. STORM DROP INLET	EXISTING CONTOUR LINE
NF NON OR FORMERLY	TC TOP OF CURB	EX. STORM FLARED END SECTION	
ELEV. ELEVATION	HW HANDICAP BOTTOM	EX. LIGHT POLE	
EX. EXISTING	HT HANDICAP TOP	EX. POWER POLE	
EOP EDGE OF PAVEMENT	HW HANDICAP BOTTOM		
CB CATCH BASIN	HW HANDICAP TOP		
DI DROP INLET	HW HANDICAP BOTTOM		
D.I. DUCTILE IRON	HW HANDICAP TOP		
CMP CORRUGATED METAL PIPE	HW HANDICAP BOTTOM		
JB JUNCTION BOX	HW HANDICAP TOP		
HW HEADWALL	HW HANDICAP BOTTOM		
SS SANITARY SEWER	HW HANDICAP TOP		
FES FLARED END SECTION	HW HANDICAP BOTTOM		
FFE FINISHED FLOOR ELEVATION	HW HANDICAP TOP		
PVC POLYVINYL CHLORIDE PIPE	HW HANDICAP BOTTOM		
FDC FIRE DEPARTMENT CONNECTION	HW HANDICAP TOP		
RCP REINFORCED CONCRETE PIPE	HW HANDICAP BOTTOM		
RPZ REDUCED PRESSURE ZONE	HW HANDICAP TOP		
DCVA DOUBLE CHECK VALVE ASSEMBLY	HW HANDICAP BOTTOM		
RPDA REDUCED PRESSURE DETECTOR ASSEMBLY	HW HANDICAP TOP		

**BOUNDARY CURVE TABLE**

CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C1	32.20'	20.50'	090°00'00"	28.99'	N83°19'45"E
C2	401.26'	5769.65'	003°59'05"	401.18'	S40°37'53"W



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Project

**INNOVATIVE  
FABRICATION**

Client

MCN HOLDINGS, LLC  
1730 ROUNDROCK DR.  
RALEIGH, NC 27615

Approvals

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH AND / OR NCDOT STANDARDS AND SPECIFICATIONS.

Drawing Title

**SITE /  
TRANSPORTATION PLAN**

Revisions

Number	Description	Date

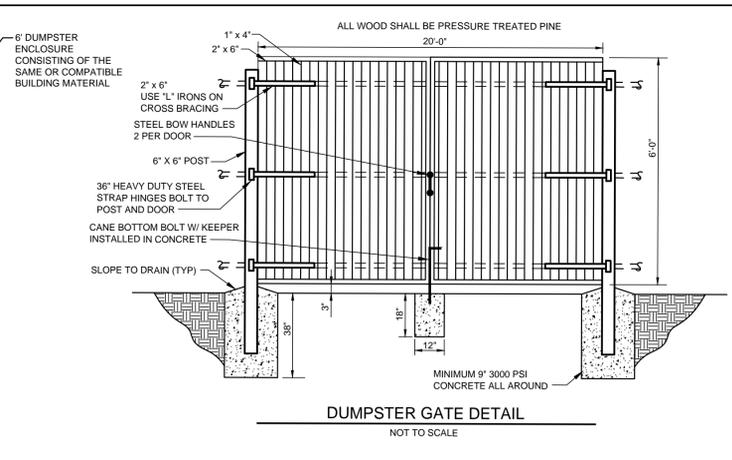
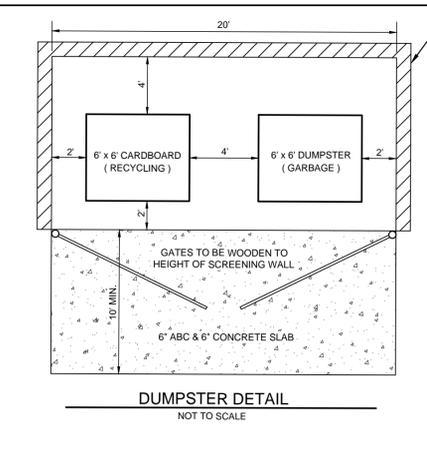
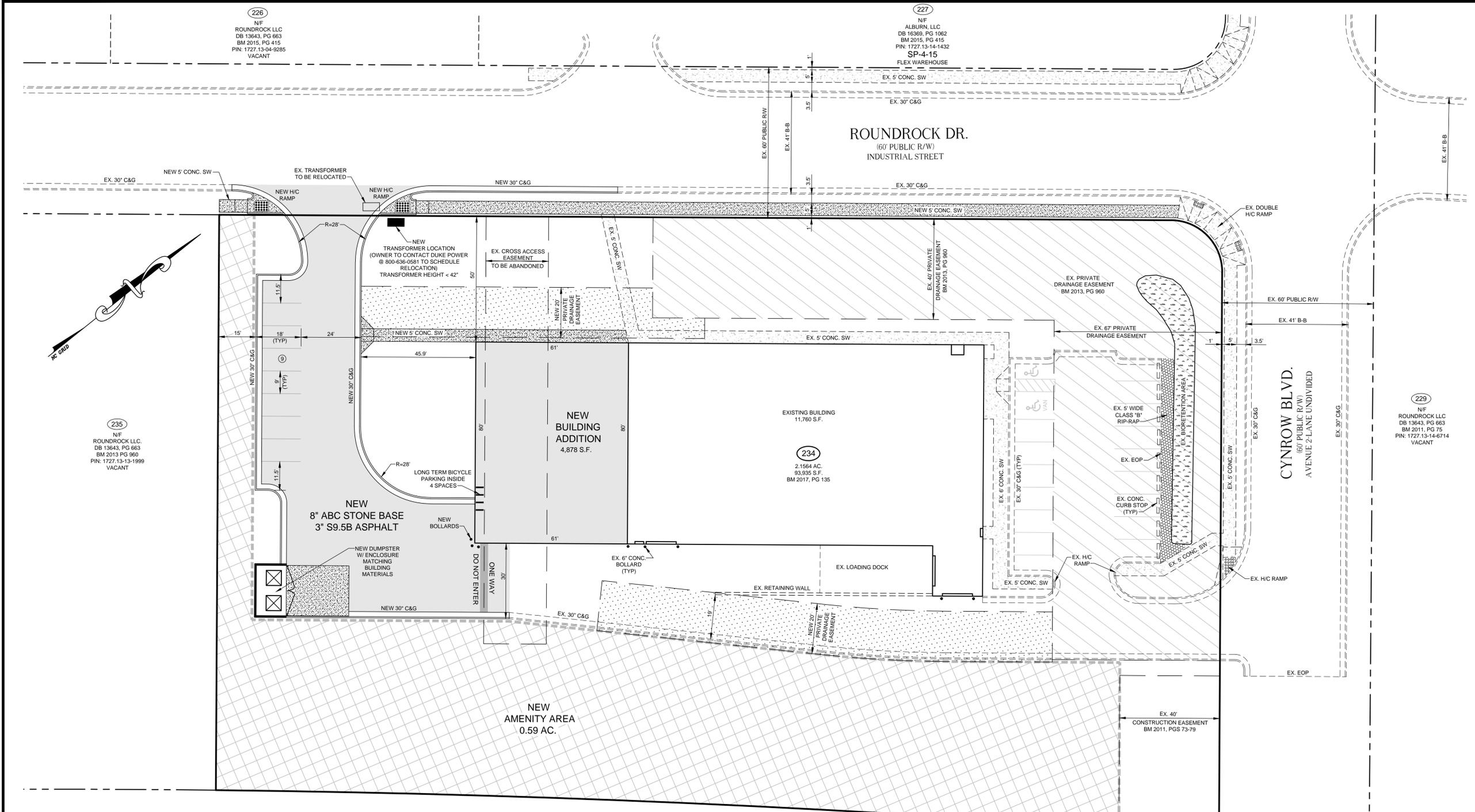
Drawing Scale 1" = 20'

Drawn By JCB / BF

Checked By JAE, JR.

Date Issued 03/10/17

**CE-3**



CSX RAILROAD  
RIGHT OF WAY

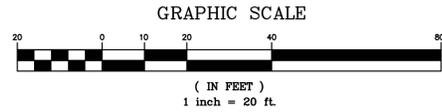
- CONSTRUCTION NOTES:**
- All Construction shall be in accordance with City of Raleigh and/or NCDOT standards.
  - The Contractor shall conduct the work in a safe manner and with a minimum amount of inconvenience to traffic.
  - The Contractor shall be responsible for all traffic control and shall adhere to the provisions of the MUTCD (most current edition).
  - Prior to start of work, a pre-construction meeting must be set up with the Contractor and City of Raleigh Transportation Field Services Staff. Contact Engineering Inspections at (919) 996-2409 to set up the meeting.
  - The Contractor shall obtain a Right-of-Way Obstruction Permit for any work which requires the temporary closure of a street, travel lane, parking space or sidewalk from Right-of-Way Services at least 48 hours in advance. Any temporary street closure must be submitted 2 weeks prior. See "Right-of-Way Closures" on [www.raleighnc.gov](http://www.raleighnc.gov) and send the Right-of-Way Obstruction Permit to [rightofwayservices@raleighnc.gov](mailto:rightofwayservices@raleighnc.gov).
  - Prior to construction beginning, all signage and traffic control shall be in place.
  - The Contractor shall repair any damaged infrastructure in the right-of-way and restore it to previous or better condition.
  - The Contractor shall repair any damages to adjacent properties and restore it to previous or better condition.
  - All sidewalks must be accessible to persons who are visually impaired and people with mobility disabilities. Pedestrian existing routes and alternate pedestrian routes during construction will be required to be compliant with the Public Rights of Way Accessibility Guidelines (PROWAG), 2010 ADA Standards for Accessible Design and the Manual on Uniform Traffic Control Devices (MUTCD).

- TRANSPORTATION NOTES:**
- RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 50 FEET OF ALL RESIDENTIAL OR RESIDENTIAL COLLECTOR INTERSECTIONS. RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 100 FEET OF ALL OTHER STREET INTERSECTIONS.
  - HANDICAPPED RAMPS TO BE CONSTRUCTED AT ALL INTERSECTIONS IN ACCORDANCE WITH CITY OF RALEIGH ENGINEERING STANDARD DETAIL 20.11.
  - SIGHT TRIANGLES TO BE LOCATED AT ALL INTERSECTIONS ARE LOCATED OUTSIDE THE RIGHT-OF-WAY SHALL BE RECORDED AS SIGHT EASEMENTS. FINAL LAYOUT OF SIGHT TRIANGLES TO BE APPROVED WITH CONSTRUCTION DRAWINGS.
  - NO SIGHT OBSTRUCTING OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERM, PARKED VEHICLES, SIGN OR OTHER OBJECTS BETWEEN THE HEIGHTS OF 2 FEET AND 8 FEET ABOVE THE CURB LINE ELEVATION, OR NEAREST TRAVELED WAY IF NO CURBING EXISTS, SHALL BE PLACED WITHIN A SIGHT TRIANGLE.
  - ALL STREET SECTIONS SHALL MEET OR EXCEED SPECIFICATIONS DETAILED IN CITY OF RALEIGH ENGINEERING STANDARD 20.31.
  - ALL STREETS AND RIGHT-OF-WAYS WITHIN AND ADJACENT TO THE PROJECT ARE CONSISTENT WITH THE RALEIGH COMPREHENSIVE PLAN WITH REGARD TO PROPOSED ROADWAY LOCATIONS AND RIGHT-OF-WAY REQUIREMENTS.
  - TURNOUT RADI TO BE MINIMUM OF 35' AT ALL PUBLIC STREET INTERSECTIONS. DRIVEWAY TURNOUTS TO BE A MINIMUM OF 25'.

**TRANSPORTATION STREET SECTION**

PREVIOUS APPROVAL OF SP-4-15, LOT 227 CONDITIONED THE EXISTING STREET SECTION OF ROUNDROCK DRIVE AND CYNROW BOULEVARD WOULD BE MAINTAINED. ALL WATER SERVICES, SEWER SERVICES, FIRE HYDRANTS AND UNDERGROUND UTILITY PEDESTALS HAVE BEEN INSTALLED AND WOULD REQUIRE RELOCATION. 5' SIDEWALKS TO BE CONSTRUCTED 3.5' BACK OF EXISTING CURB WITH STREET TREES INSTALLED BACK OF SIDEWALK.

**AMENITY AREA  
REQUIRED..... 0.26 AC.  
PROVIDED..... 0.59AC.**



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Project

**INNOVATIVE  
FABRICATION**

Client

MCN HOLDINGS, LLC  
1730 ROUNDROCK DR.  
RALEIGH, NC 27615

Approvals

**ATTENTION CONTRACTORS:**

The Construction Contractor responsible for the extension of water, sewer, and/or gas, as approved in these plans, is responsible for contacting the PUBLIC WORKS DEPARTMENT at (919) 996-2300 and the PUBLIC UTILITIES DEPARTMENT at (919) 996-2300 at least 14 business days prior to beginning any of these construction. FAILURE to notify both City Departments in advance of beginning construction will result in the issuance of necessary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure. FAILURE to call for inspection, install a Downstream Plug, have Permitted Plans on the jobsite, or any other violation of CITY OF RALEIGH STANDARDS will result in a Stop-Work Order/Exclosure from future work in the CITY OF RALEIGH.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH AND / OR NCDOT STANDARDS AND SPECIFICATIONS.

Drawing Title

**UTILITY PLAN**

Revisions

Number	Description	Date

Drawing Scale 1" = 20'

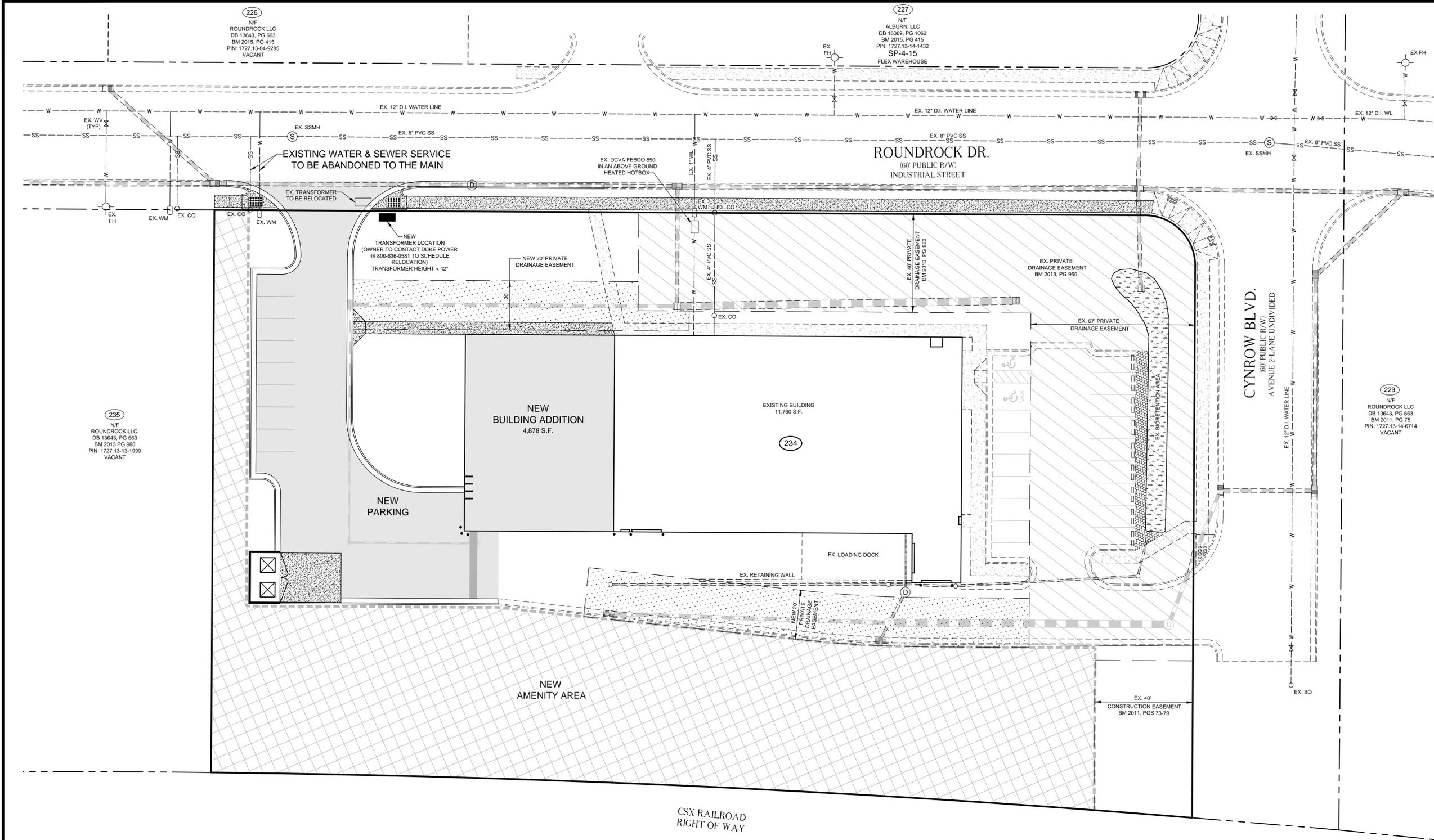
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Checked By JAE, JR.

Date Issued 03/10/17

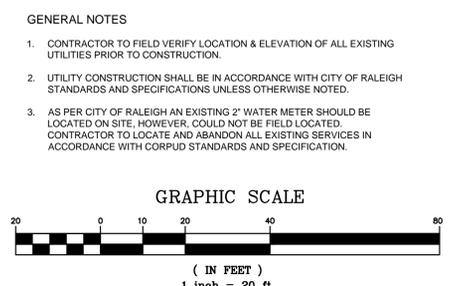
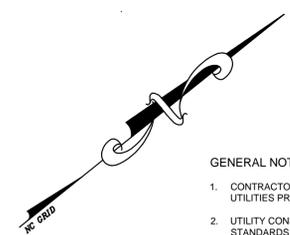
**CE-4**

of



**STANDARD UTILITY NOTES (as applicable):**

- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition).
- Utility separation requirements:
  - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary pipe shall be specified & installed to watertight specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
  - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
  - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to watertight specifications.
  - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer.
  - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 24" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49).
  - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
- Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction.
- Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department.
- 3.0' minimum cover is required on all water mains & sewer force mains. 4.0' minimum cover is required on all reuse mains.
- It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure.
- Install 1/2" copper water services with meters located at ROW or within a 2x2' Waterline Easement immediately adjacent. *NOTE: it is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure.*
- Install 4" PVC+ sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
- Pressure reducing valves are required on all water services exceeding 80 psi; backflow valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole.
- All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
- NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction.
- Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit. Contact Tim Beasley at (919) 996-2334 or timothy.beasley@raleighnc.gov for more information.
- Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. Contact Joanie Hartley at (919) 996-5923 or joanie.hartley@raleighnc.gov for more information.



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