

**LOCATION MAP**  
SCALE: 1" = 2,000'±

# ZONING PLANS FOR HARTZ MOUNTAIN INDUSTRIES, INC. PROPOSED RESIDENTIAL REDEVELOPMENT PLAN

BLOCK 541, LOT 2  
750 WALNUT AVENUE  
TOWNSHIP OF CRANFORD  
UNION COUNTY, NEW JERSEY

**OWNER / APPLICANT**

HARTZ MOUNTAIN INDUSTRIES, INC.  
400 PLAZA DRIVE  
TOWN OF SECAUCUS, NEW JERSEY 07094

HARTZ  
MOUNTAIN  
INDUSTRIES  
400 PLAZA DRIVE  
P.O. BOX 1515  
SECAUCUS, N.J. 07096-1515



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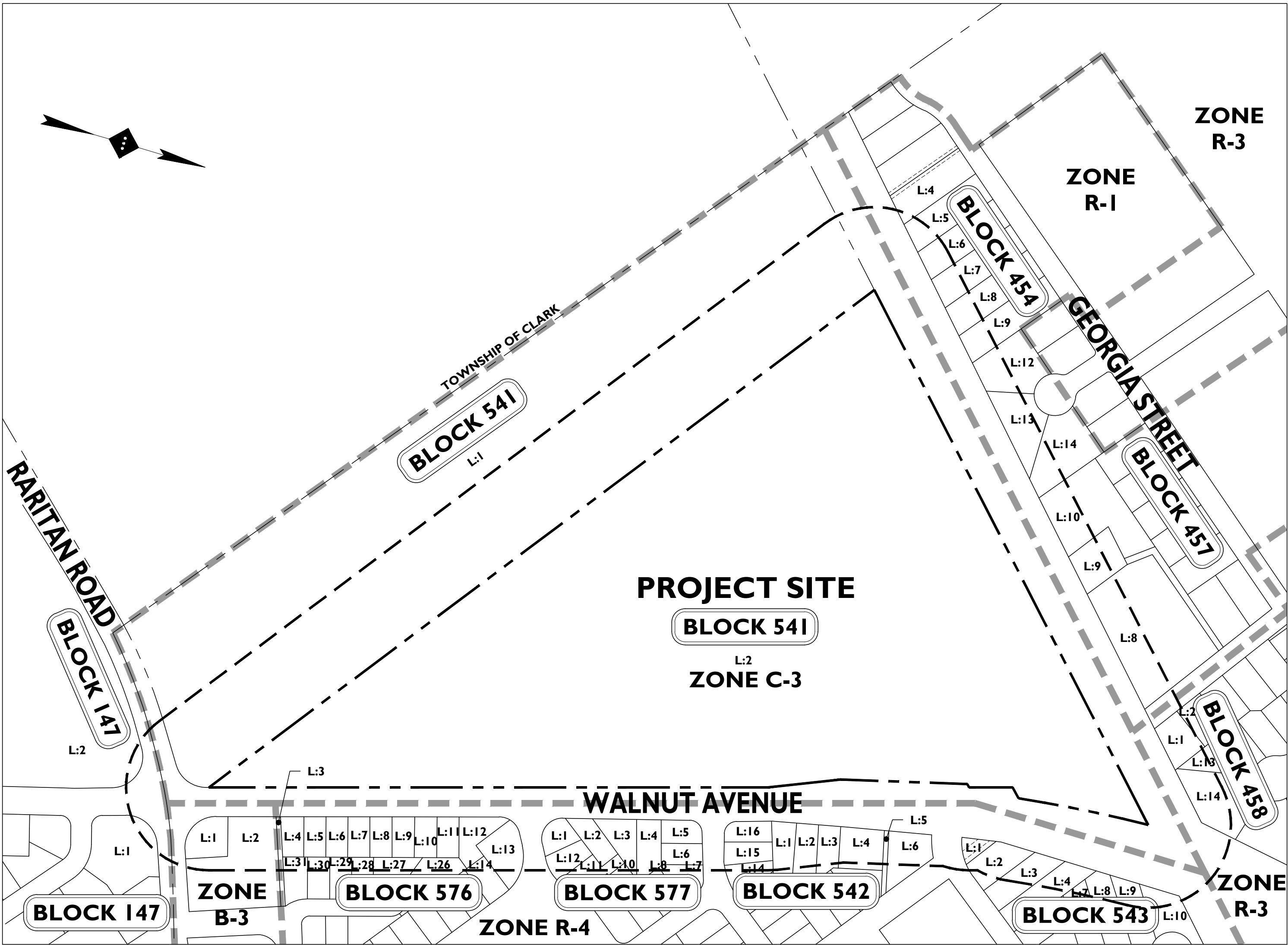
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SOURCE: AERIAL MAP FROM GOOGLE EARTH PRO, DATED NOVEMBER 17, 2016.

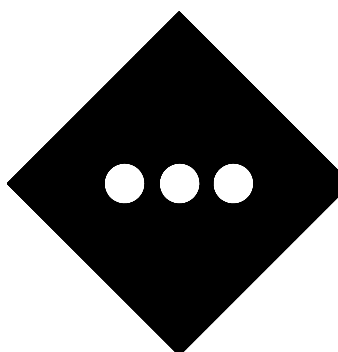
**AERIAL MAP**  
SCALE: 1" = 200'±



SOURCE: TOWNSHIP OF CRANFORD TAX MAP SHEETS 96, 97, 129, 133, & 142, AND TOWNSHIP OF CLARK TAX MAP SHEET 35.

**KEY MAP**  
SCALE: 1" = 200'±

PLANS PREPARED BY:



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Know what's **below**  
Call before you dig.

**PLAN REFERENCE MATERIALS:**

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
  - BOUNDARY & TOPOGRAPHIC SURVEY, PREPARED BY CONTROL LAYOUTS, INC.
  - ARCHITECTURAL PLANS PREPARED BY MINNO & WASKO ARCHITECTS AND PLANNERS, DATED 02/06/2017.
  - AERIAL MAP FROM GOOGLE EARTH PRO IMAGERY, DATED NOVEMBER 16, 2016.
  - LOCATION MAP OBTAINED FROM THE US DEPT. OF THE INTERIOR US GEOLOGICAL SURVEY 7.5 MINUTE SERIES ROSELLE & PERTH AMBOY QUADRANGLE 2016.
  - TOWNSHIP OF CRANFORD TAX MAP SHEETS 96, 97, 129, 133, & 142, AND TOWNSHIP OF CLARK TAX MAP SHEET 35.
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

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PROJECT :

PROPOSED RESIDENTIAL  
REDEVELOPMENT  
750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

**COVER SHEET**

ENGINEER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

DRAWING BY: DB

CHECK BY: ZC

DWG NO: C-1

CARD FILE NO: 1 OF 23



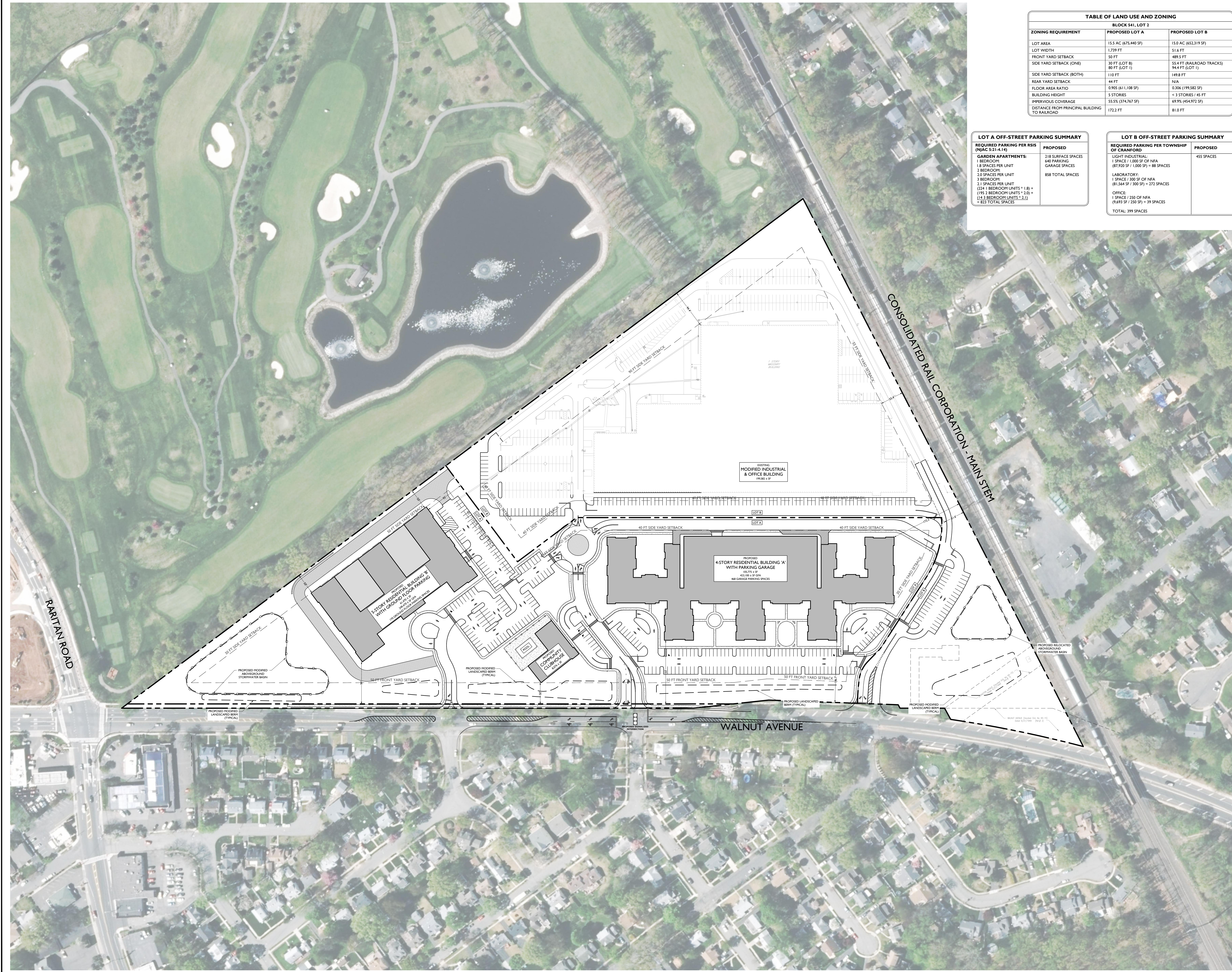


TABLE OF LAND USE AND ZONING		
BLOCK 541, LOT 2		
ZONING REQUIREMENT	PROPOSED LOT A	PROPOSED LOT B
LOT AREA	15.5 AC (675,440 SF)	15.0 AC (652,319 SF)
LOT WIDTH	1,739 FT	51.6 FT
FRONT YARD SETBACK	50 FT	489.5 FT
SIDE YARD SETBACK (ONE)	30 FT (LOT B)	55.4 FT (RAILROAD TRACKS)
	80 FT (LOT 1)	94.4 FT (LOT 1)
SIDE YARD SETBACK (BOTH)	110 FT	149.8 FT
REAR YARD SETBACK	44 FT	N/A
FLOOR AREA RATIO	0.905 (611,108 SF)	0.306 (199,582 SF)
BUILDING HEIGHT	5 STORIES	< 3 STORIES / 45 FT
IMPERVIOUS COVERAGE	55.5% (374,767 SF)	69.9% (454,972 SF)
DISTANCE FROM PRINCIPAL BUILDING TO RAILROAD	172.2 FT	81.0 FT

LOT A OFF-STREET PARKING SUMMARY	
REQUIRED PARKING PER RIS (NJAC 5:21-4.14)	PROPOSED
GARDEN APARTMENTS: 1 BEDROOM: 1.8 SPACES PER UNIT 2 BEDROOM: 2.0 SPACES PER UNIT 3 BEDROOM: 2.1 SPACES PER UNIT (224 1 BEDROOM UNITS * 1.8) + (195 2 BEDROOM UNITS * 2.0) + (14 3 BEDROOM UNITS * 2.1) = 823 TOTAL SPACES	218 SURFACE SPACES 440 PARKING GARAGE SPACES  858 TOTAL SPACES

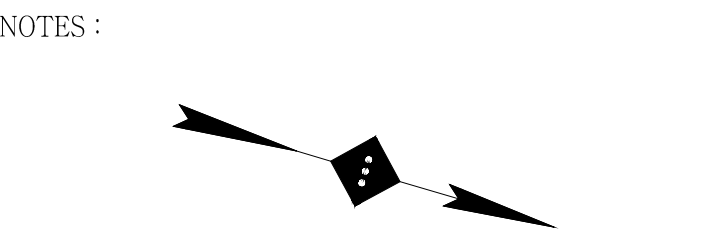
LOT B OFF-STREET PARKING SUMMARY	
REQUIRED PARKING PER TOWNSHIP OF CRANFORD	PROPOSED
LIGHT INDUSTRIAL: 1 SPACE / 1,000 SF OF NFA (87,920 SF / 1,000 SF) = 88 SPACES  LABORATORY: 1 SPACE / 300 SF OF NFA (81,544 SF / 300 SF) = 272 SPACES  OFFICE: 1 SPACE / 250 SF OF NFA (9,693 SF / 250 SF) = 39 SPACES  TOTAL: 399 SPACES	455 SPACES

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MOUNTAIN  
INDUSTRIES  
400 PLAZA DRIVE  
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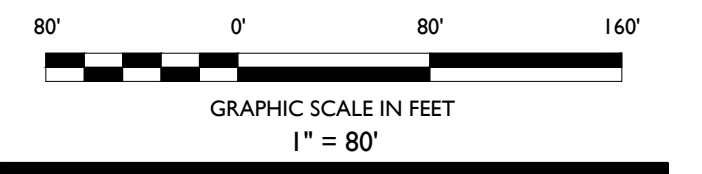
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- SITE LEGEND**
- PROPERTY BOUNDARY
  - ADJACENT PROPERTY BOUNDARY
  - PROPOSED CURB
  - EXISTING CURB
  - EXISTING BUILDING
  - PROPOSED BUILDING



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

**OVERALL SITE PLAN  
- PHASE I -**

DESIGNED BY: JEFFREY A. MARTELL  
DATE: 08/21/2017

PROJECT NO.: T-16504  
DRAWING BY: DB  
CHK BY: ZC  
DWG NO.: C-2

CADD FILE NO.: 2 OF 23



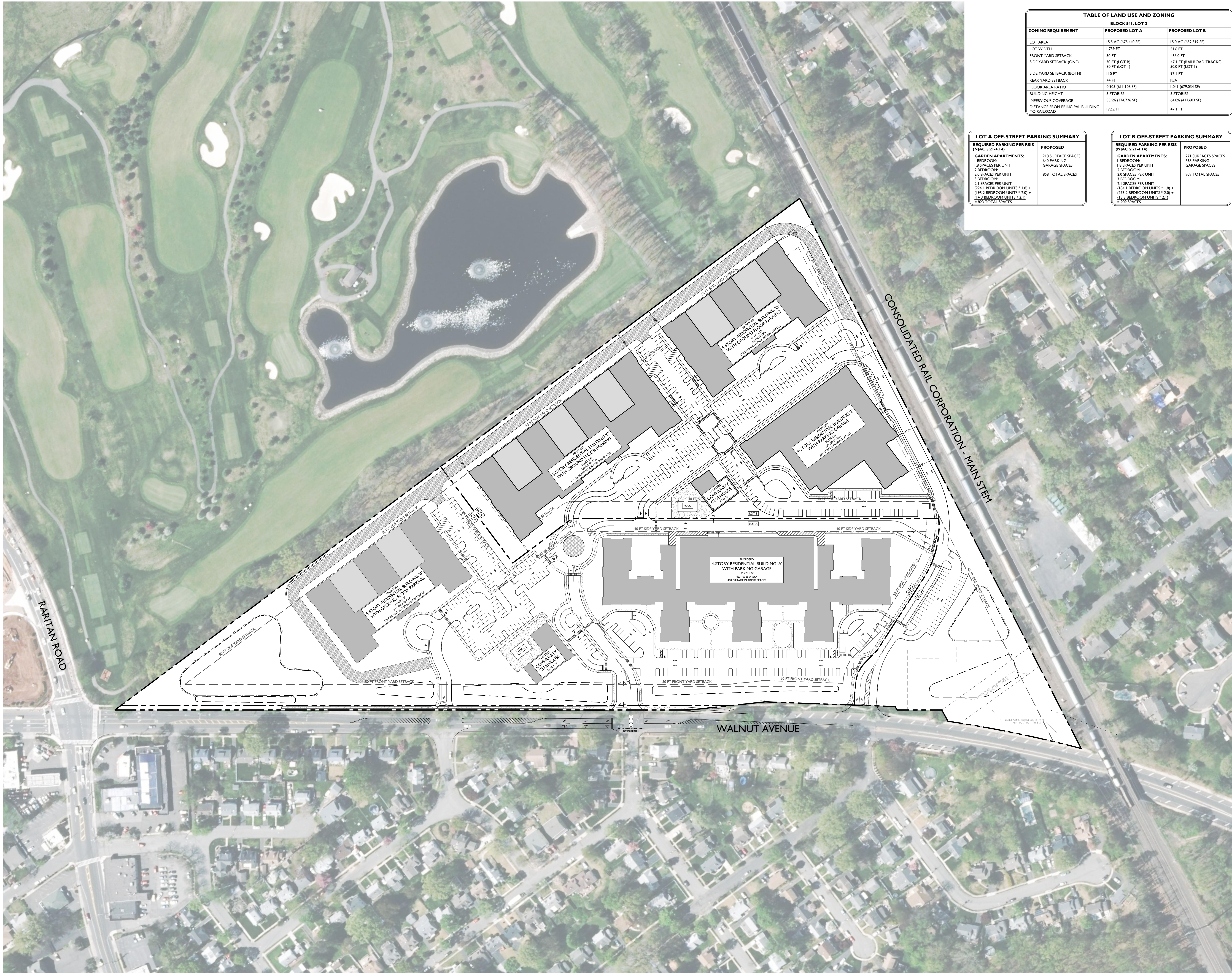


TABLE OF LAND USE AND ZONING		
BLOCK 41, LOT 2		
ZONING REQUIREMENT	PROPOSED LOT A	PROPOSED LOT B
LOT AREA	15.5 AC (675,440 SF)	15.0 AC (652,319 SF)
LOT WIDTH	1,739 FT	51.6 FT
FRONT YARD SETBACK	50 FT	456.0 FT
SIDE YARD SETBACK (ONE)	30 FT (LOT B) 80 FT (LOT I)	47.1 FT (RAILROAD TRACKS) 50.0 FT (LOT I)
SIDE YARD SETBACK (BOTH)	110 FT	97.1 FT
REAR YARD SETBACK	44 FT	N/A
FLOOR AREA RATIO	0.905 (611,108 SF)	1.041 (679,034 SF)
BUILDING HEIGHT	5 STORIES	5 STORIES
IMPERVIOUS COVERAGE	55.5% (374,726 SF)	64.0% (417,603 SF)
DISTANCE FROM PRINCIPAL BUILDING TO RAILROAD	172.2 FT	47.1 FT

LOT A OFF-STREET PARKING SUMMARY	
REQUIRED PARKING PER RSIS (NJAC 5:21-4.14)	PROPOSED
GARDEN APARTMENTS: 1 BEDROOM: 1.8 SPACES PER UNIT 2 BEDROOM: 2.0 SPACES PER UNIT 3 BEDROOM: 2.1 SPACES PER UNIT (224 1 BEDROOM UNITS * 1.8) + (273 2 BEDROOM UNITS * 2.0) + (14 3 BEDROOM UNITS * 2.1) = 823 TOTAL SPACES	218 SURFACE SPACES 408 PARKING GARAGE SPACES 858 TOTAL SPACES

LOT B OFF-STREET PARKING SUMMARY	
REQUIRED PARKING PER RSIS (NJAC 5:21-4.14)	PROPOSED
GARDEN APARTMENTS: 1 BEDROOM: 1.8 SPACES PER UNIT 2 BEDROOM: 2.0 SPACES PER UNIT 3 BEDROOM: 2.1 SPACES PER UNIT (184 1 BEDROOM UNITS * 1.8) + (273 2 BEDROOM UNITS * 2.0) + (15 3 BEDROOM UNITS * 2.1) = 909 SPACES	271 SURFACE SPACES 638 PARKING GARAGE SPACES 909 TOTAL SPACES

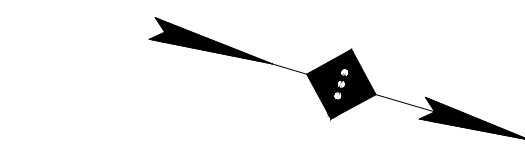
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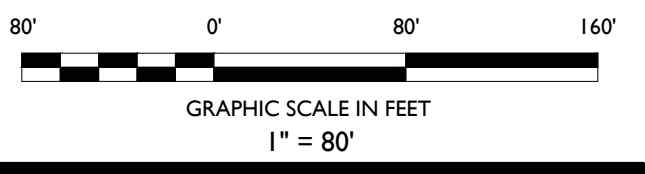
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Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SITE LEGEND	
---	PROPERTY BOUNDARY
---	ADJACENT PROPERTY BOUNDARY
---	PROPOSED CURB
---	EXISTING CURB
---	EXISTING BUILDING
---	PROPOSED BUILDING



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL REDEVELOPMENT**  
750 WALNUT AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

**OVERALL SITE PLAN - PHASE 2 -**

DESIGNED BY  
JEFFREY A. MARTELL  
812 PE 4 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

DRAWING BY : DB

CHECK BY : ZC

DWG NO. :

**C-3**

CADD FILE NO. : 3 OF 23



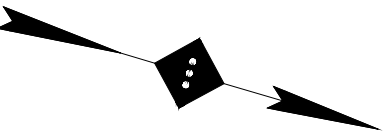
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INDUSTRIES  
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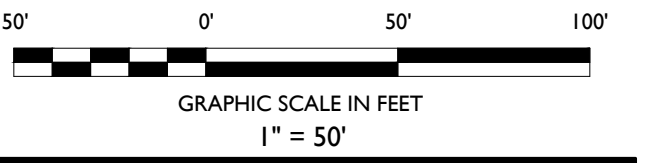
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NOTES :



SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
750 WALNUT  
AVENUE  
GRANFORD, N.J.

DRAWING TITLE :

SUBDIVISION EXHIBIT

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/2/2017

PROJECT NO. : T-16504

DRAWING BY : DB

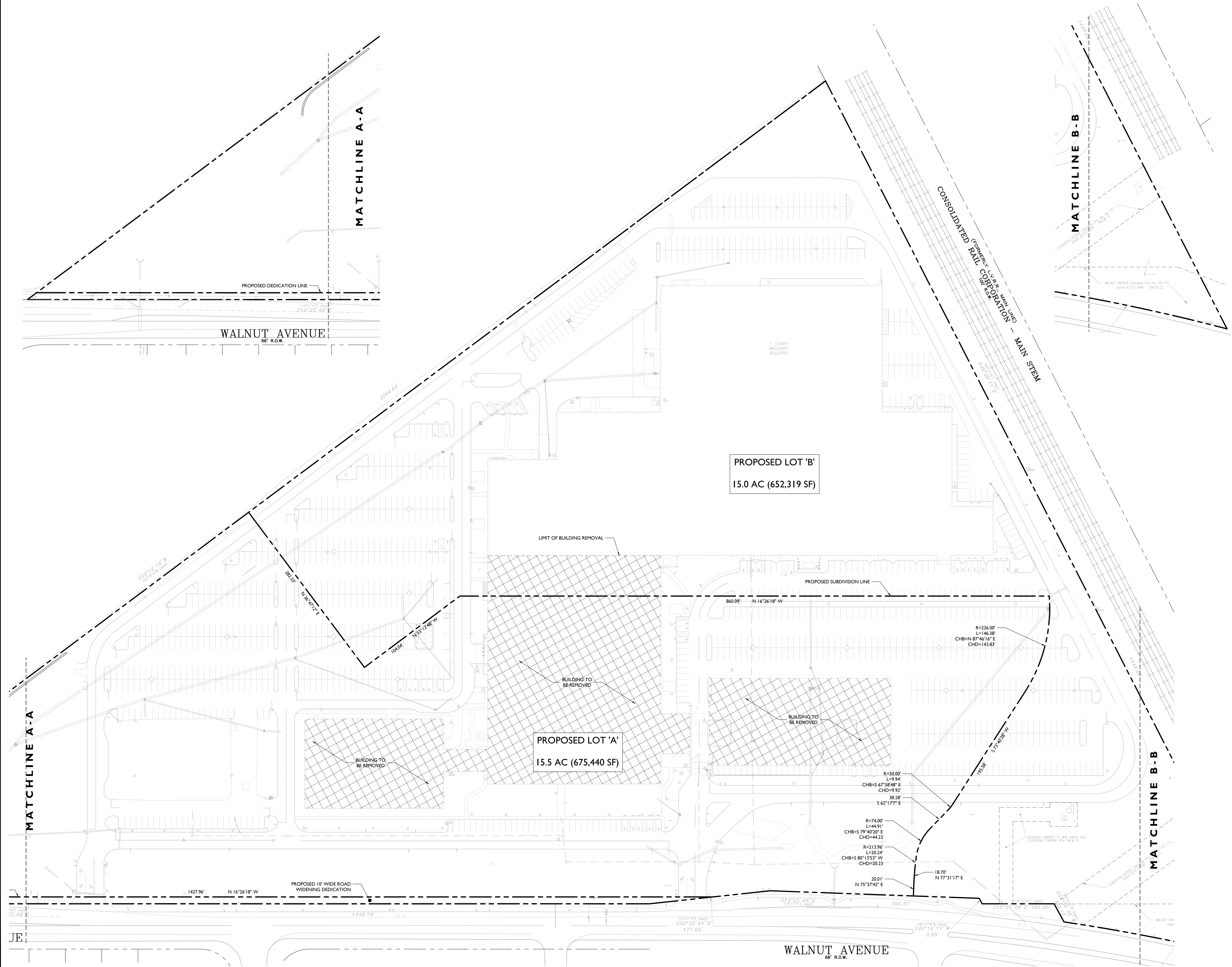
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DWG NO. :

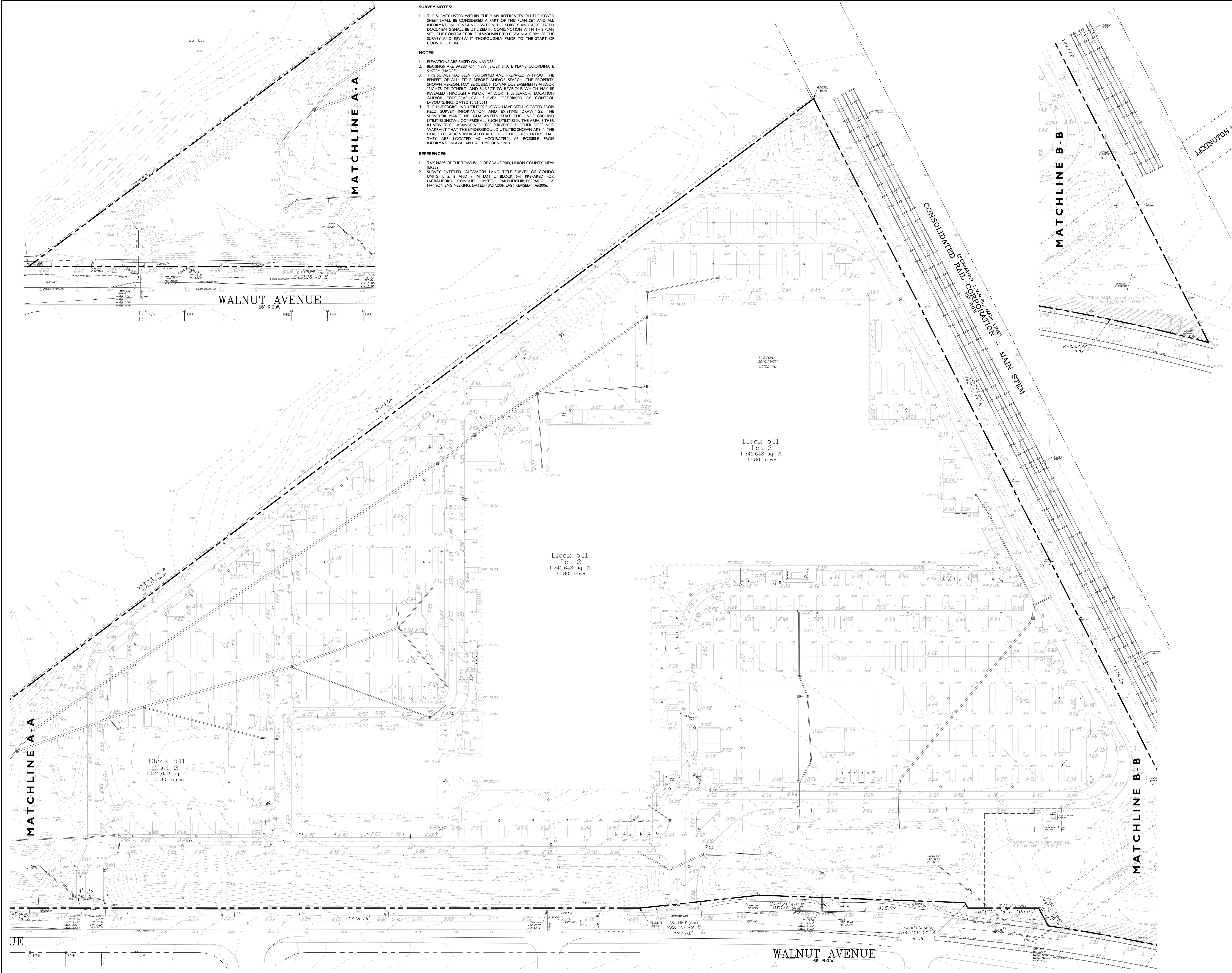
**C-4**

CADD FILE NO. :

4 OF 23







**SURVEY NOTES:**

1. THE SURVEY LISTED WITHIN THE PLAN REFERENCES ON THE COVER SHEET SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THE SURVEY AND ASSOCIATED DOCUMENTS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF THE SURVEY AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.
2. ELEVATIONS ARE BASED ON NAVD83.
3. BEARINGS ARE BASED ON NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD83).
4. THIS SURVEY HAS BEEN PERFORMED AND PREPARED WITHOUT THE BENEFIT OF ANY TITLE REPORT AND/OR SEARCH. THE PROPERTY SHOWN HEREON, MAY BE SUBJECT TO VARIOUS EASEMENTS AND/OR "RIGHTS OF OTHERS" AND SUBJECT TO REVISIONS WHICH MAY BE REVEALED THROUGH A REPORT AND/OR TITLE SEARCH. LOCATION AND/OR TOPOGRAPHICAL SURVEY PERFORMED BY CONTROL LAYOUTS, INC. DATED 10/21/2016.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE AT TIME OF SURVEY.

**REFERENCES:**

1. TAX MAPS OF THE TOWNSHIP OF CRANFORD, UNION COUNTY, NEW JERSEY.
2. SURVEY ENTITLED "ALTA/ACSM LAND TITLE SURVEY OF CONDO UNITS 1, 5, 6 AND 7 IN LOT 2, BLOCK 541 PREPARED FOR H-CRANFORD, CONDUIT LIMITED PARTNERSHIP PREPARED BY HANSON ENGINEERING, DATED 10/21/2006, LAST REVISED 11/6/2006.

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NOTES :

**SITE LEGEND**

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- CURB
- BUILDING
- FENCE
- GUIDE RAIL
- RAILROAD TRACKS
- SIGNS
- LIGHT POLE
- BOLLARD
- SPEED BUMP
- GRADING CONTOUR
- GRADE SPOT ELEVATION
- TOP OF CURB
- BOTTOM OF CURB
- FIRST FLOOR ELEVATION
- PARKING STALL COUNT
- STORM/SEWER MAIN
- STORM/SEWER DEVICES
- GAS VALVE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC POLE
- RIP-RAP AREA

50' 0' 50' 100'  
GRAPHIC SCALE IN FEET  
1" = 50'

03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :

**PROPOSED RESIDENTIAL REDEVELOPMENT**

750 WALNUT AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

**EXISTING CONDITIONS PLAN**

ENGINEER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

DRAWING BY : DB

CHECK BY : JC

DWG NO. : **C-5**

CADD FILE NO. : 5 OF 23



HARTZ  
MOUNTAIN

INDUSTRIES

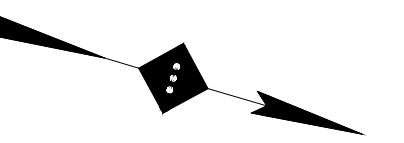
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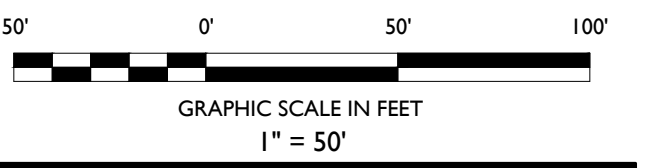
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Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
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01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
PROPOSED RESIDENTIAL  
REDEVELOPMENT

750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

SITE PLAN  
- PHASE I -

32037858  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

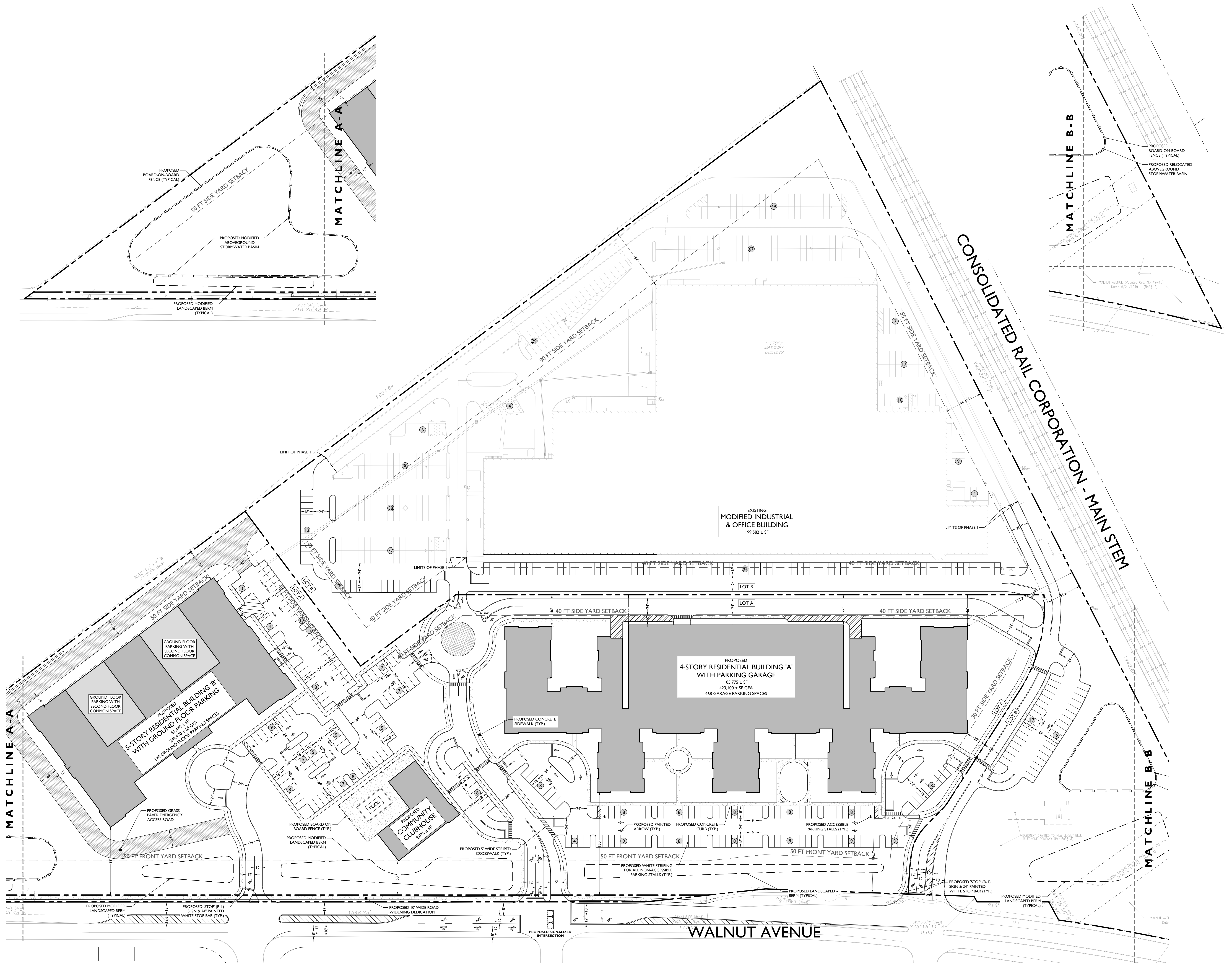
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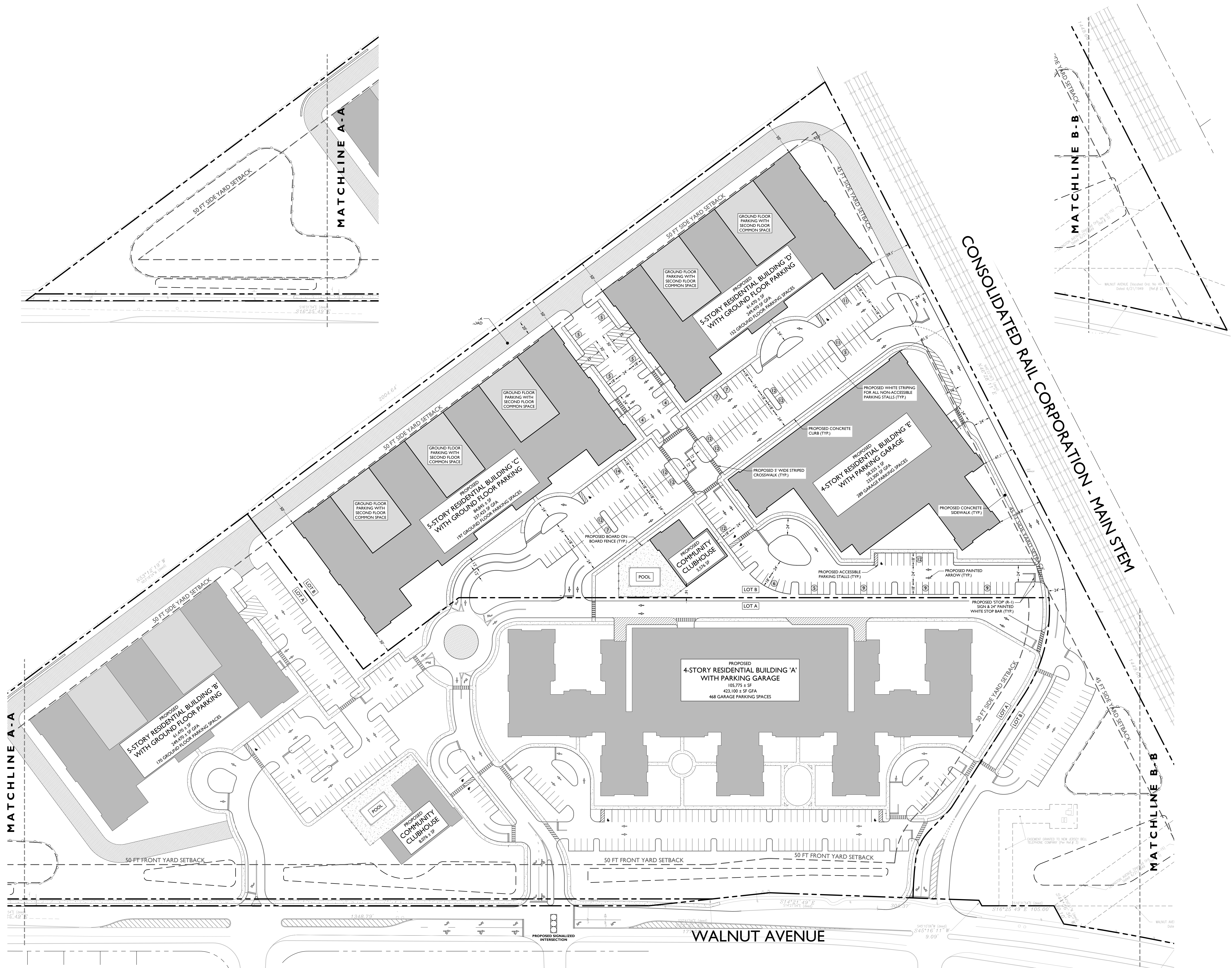
DATE : 03/21/2017

C-6

CADD FILE NO. : 6/19/23







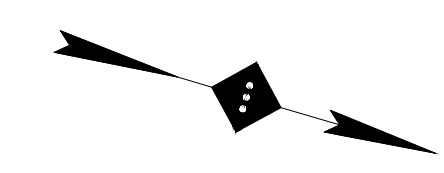
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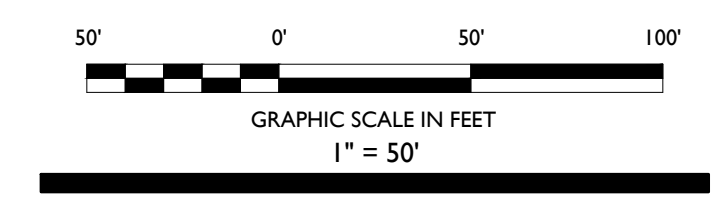
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES :



**SITE LEGEND**

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL REDEVELOPMENT**  
150 WALNUT AVENUE  
SECAUCUS, N.J.

DRAWING TITLE :

**SITE PLAN - PHASE 2 -**

DESIGNER :  
JEFFREY A. MARTELL  
812 PE 4 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

DRAWING BY : DB

CHECK BY : JC

DWG NO. :

**C-7**

CADD FILE NO. : 7 OF 23



HARTZ  
MOUNTAIN

INDUSTRIES

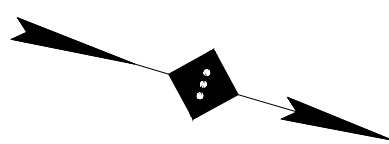
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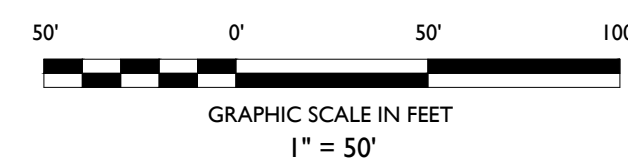
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING
- CONTOUR LINE
- RIDGE LINE



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DBC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :

PROPOSED RESIDENTIAL  
REDEVELOPMENT  
750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

GRADING &  
DRAINAGE PLAN  
- PHASE I -

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

DRAWING BY : DB

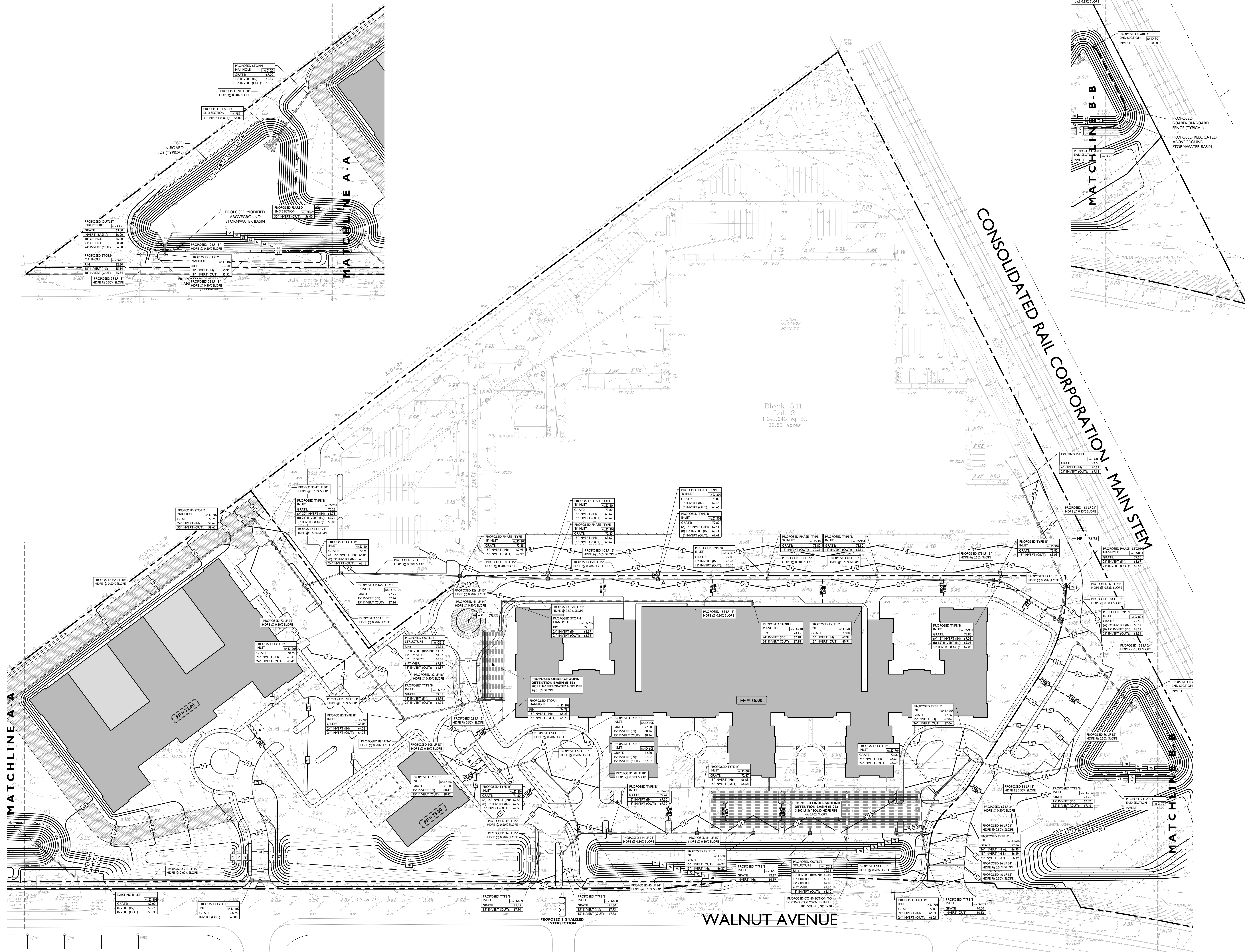
CHK BY : ZC

DRW NO :

C-8

CADD FILE NO :

8 OF 23



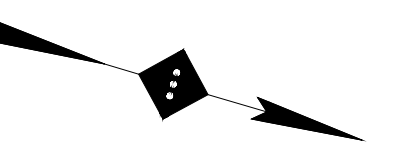




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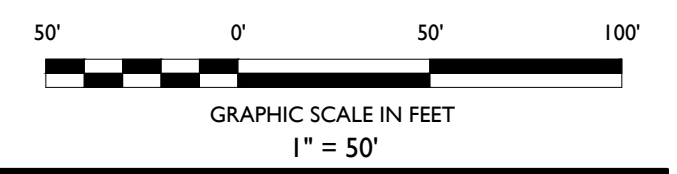
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 • Fax 201.340.4472

NOTES:



SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING
- CONTOUR LINE
- RIDGE LINE



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER IRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION:

PROJECT:  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
150 WALNUT  
AVENUE  
GRANFORD, N.J.

DRAWING TITLE:

**GRADING &  
DRAINAGE PLAN  
- PHASE 2 -**

DESIGNER:  
JEFFREY A. MARTELL  
812 PG 4 47290

DATE: 03/21/2017

PROJECT NO.: T-16504

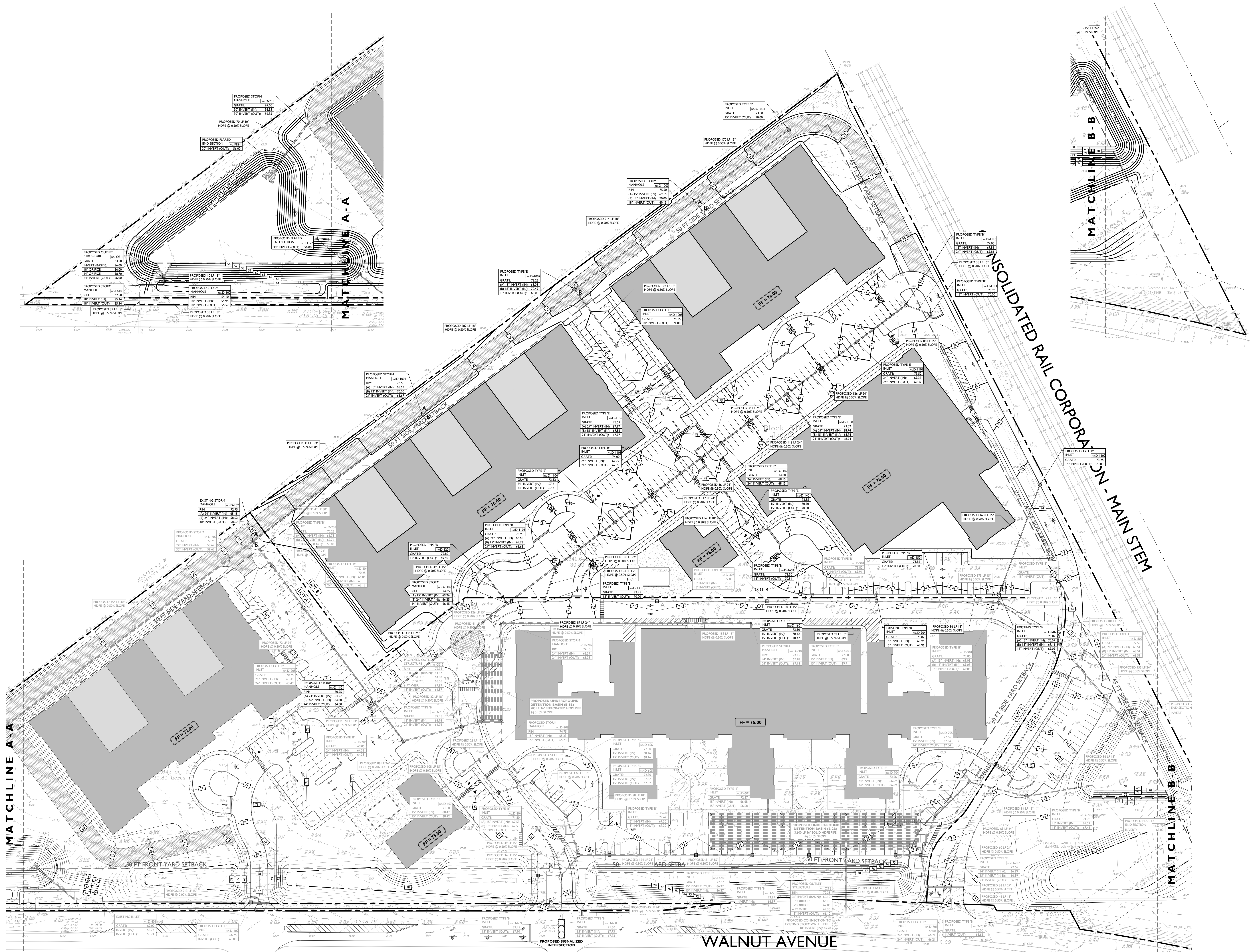
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DWG NO.

**C-9**

CADD FILE NO. 9 PG 23





HARTZ  
MOUNTAIN

INDUSTRIES

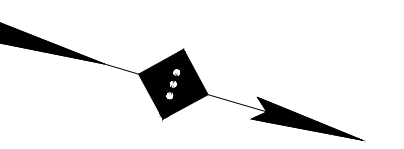
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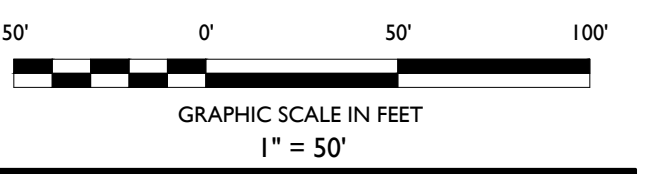
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES:



SITE LEGEND

- G PROPOSED GAS LINE
- SAN PROPOSED SANITARY SEWER LATERAL
- W PROPOSED WATER SERVICE
- ET/C PROPOSED DATA AND ELECTRICAL TRENCH
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



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REVISION:

PROJECT:

PROPOSED RESIDENTIAL  
REDEVELOPMENT

750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE:

UTILITY PLAN  
- PHASE I -

DESIGNED BY  
JEFFREY A. MARTELL  
812 PE 4 47290

DATE: 03/21/2017

PROJECT NO.: T-16504

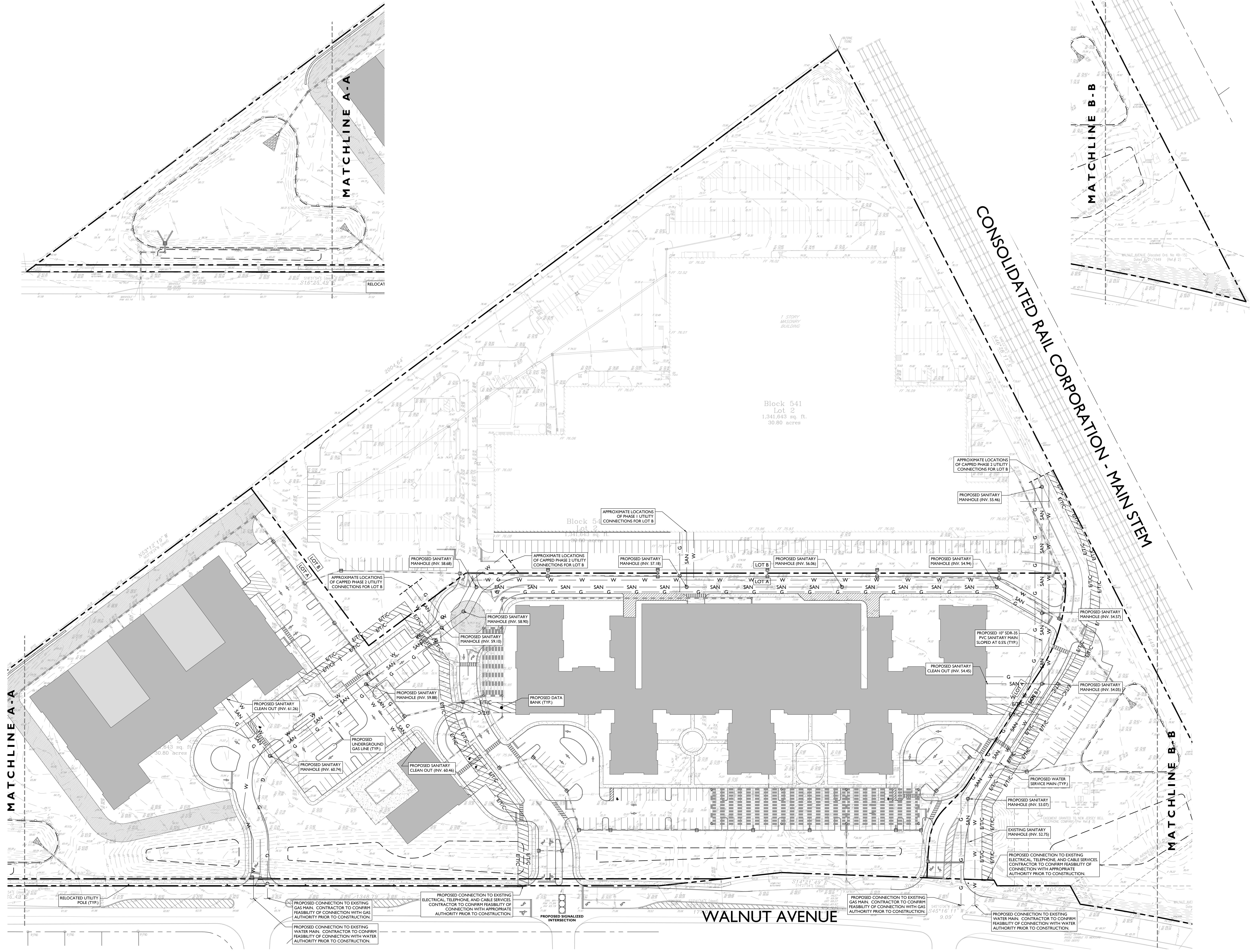
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CHK BY: ZC

ENG NO:

C-10

CADD FILE NO: 10 OF 23





HARTZ  
MOUNTAIN

INDUSTRIES

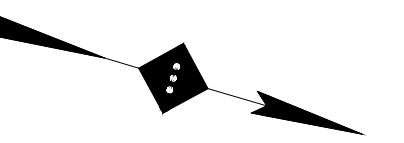
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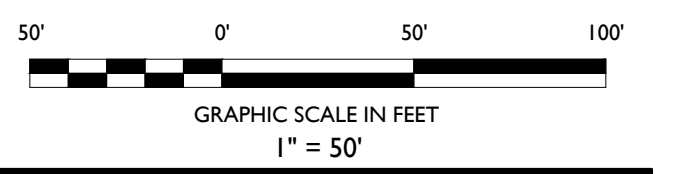
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SITE LEGEND

- G PROPOSED GAS LINE
- SAN PROPOSED SANITARY SEWER LATERAL
- W PROPOSED WATER SERVICE
- ET/C PROPOSED DATA AND ELECTRICAL TRENCH
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



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01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :

PROPOSED RESIDENTIAL  
REDEVELOPMENT

750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

UTILITY PLAN  
- PHASE 2 -

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

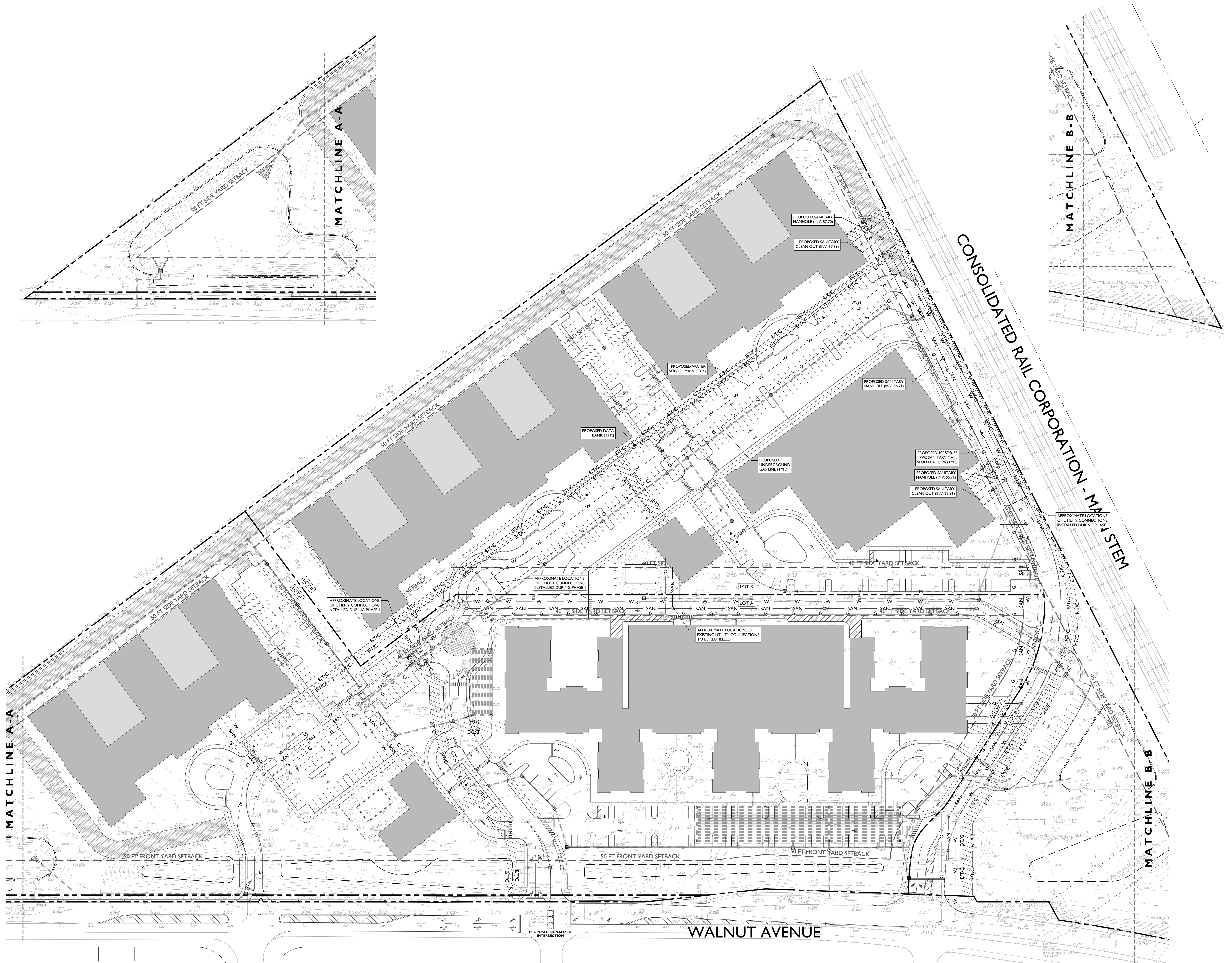
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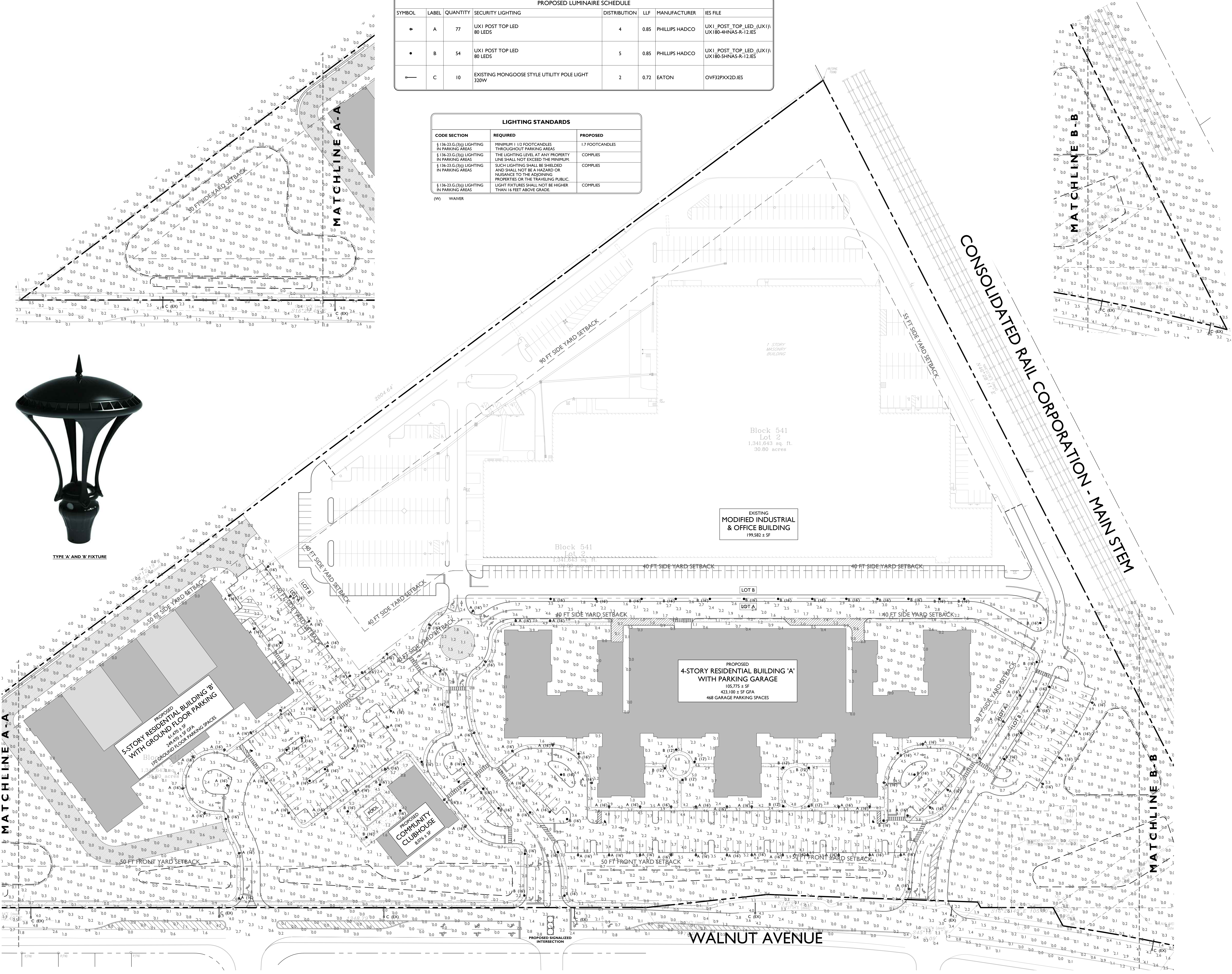
DATE : 03/21/2017



C-11

CADD FILE NO. : 11 09 23







PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	77	UX1 POST TOP LED 80 LEDS	4	0.85	PHILLIPS HADCO	UX1_POST_TOP_LED_(UX1) UX180-4HNA5-R-12.IES
	B	54	UX1 POST TOP LED 80 LEDS	5	0.85	PHILLIPS HADCO	UX1_POST_TOP_LED_(UX1) UX180-5HNA5-R-12.IES
	C	10	EXISTING MONGOOSE STYLE UTILITY POLE LIGHT 320W	2	0.72	EATON	OVF32PXX2D.IES

LIGHTING STANDARDS		
CODE SECTION	REQUIRED	PROPOSED
§ 136-23.G.(3)(i) LIGHTING IN PARKING AREAS	MINIMUM 1 1/2 FOOTCANDLES THROUGHOUT PARKING AREAS	1.7 FOOTCANDLES
§ 136-23.G.(3)(ii) LIGHTING IN PARKING AREAS	THE LIGHTING LEVEL AT ANY PROPERTY LINE SHALL NOT EXCEED THE MINIMUM.	COMPLIES
§ 136-23.G.(3)(iii) LIGHTING IN PARKING AREAS	SUCH LIGHTING SHALL BE SHIELDED AND SHALL NOT BE A HAZARD OR NUISANCE TO THE ADJOINING PROPERTIES OR THE TRAVELING PUBLIC.	COMPLIES
§ 136-23.G.(3)(iv) LIGHTING IN PARKING AREAS	LIGHT FIXTURES SHALL NOT BE HIGHER THAN 16 FEET ABOVE GRADE.	COMPLIES
(v) WAIVER		



TYPE 'A' AND 'B' FIXTURE

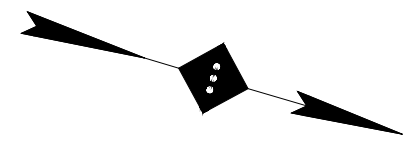
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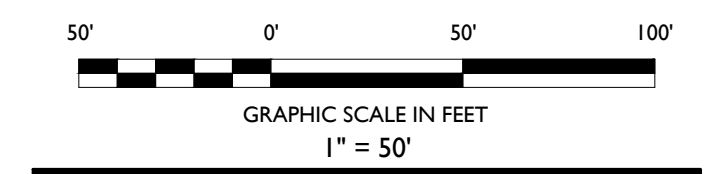
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES :



SITE LEGEND

---	PROPERTY BOUNDARY
- - - -	ADJACENT PROPERTY BOUNDARY
---	PROPOSED CURB
---	EXISTING CURB
---	EXISTING BUILDING
---	PROPOSED BUILDING



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NO.	BY	DATE	ISSUE OR REVISION

REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL REDEVELOPMENT**  
750 WALNUT AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

**LIGHTING PLAN - PHASE I -**

DRAWN BY :  
JEFFREY A. MARTELL

DATE :  
03/21/2017

PROJECT NO. :  
T-16504

DRAWING BY :  
DB

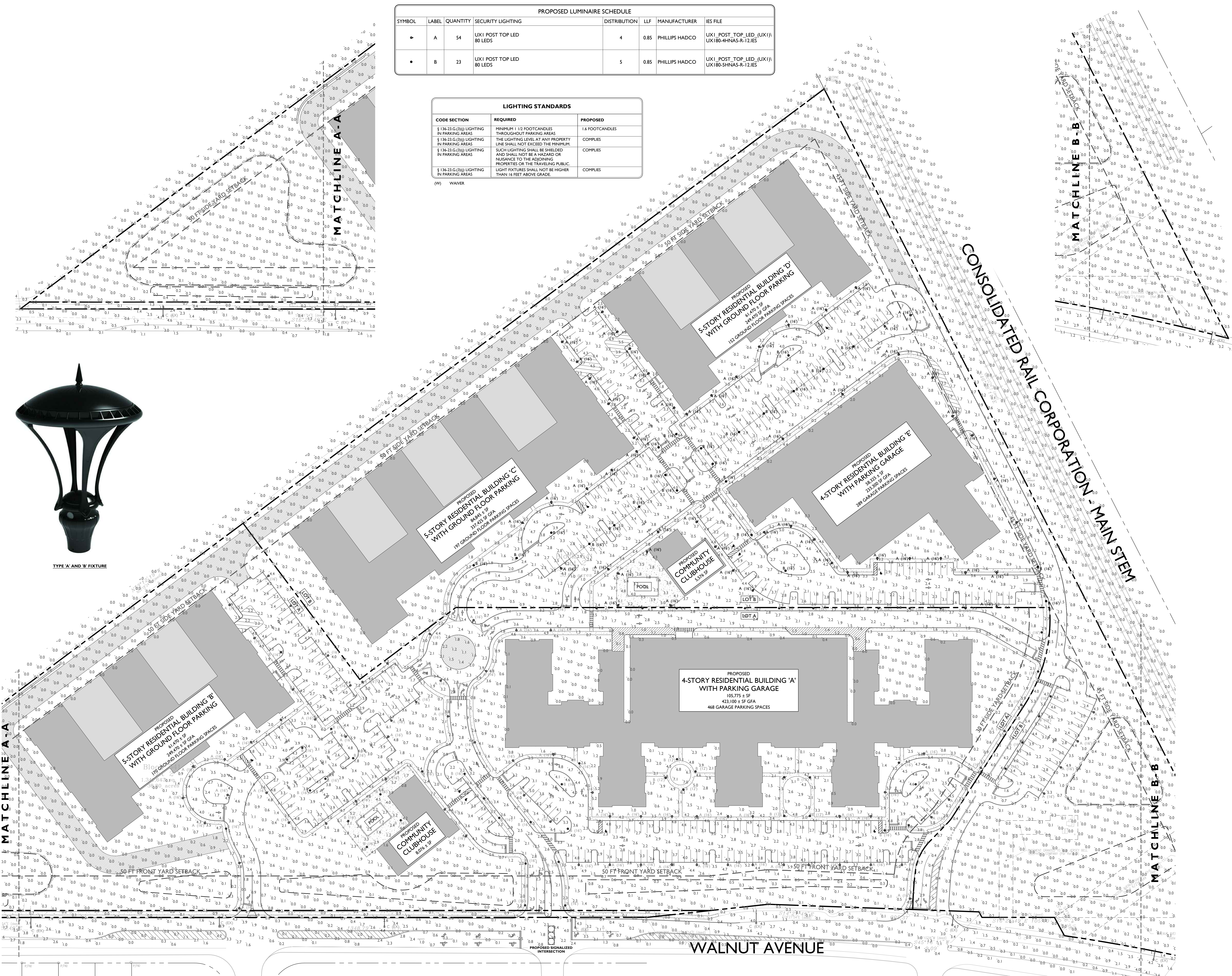
CHK BY :  
JC

DATE :  
03/21/2017

CAD FILE NO. :  
12 OF 23

**C-12**





PROPOSED LUMINAIRE SCHEDULE						
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER
▶	A	54	UX1 POST TOP LED 80 LEDS	4	0.85	PHILLIPS HADCO
•	B	23	UX1 POST TOP LED 80 LEDS	5	0.85	PHILLIPS HADCO

LIGHTING STANDARDS		
CODE SECTION	REQUIRED	PROPOSED
§ 136-23 G.(3)(i) LIGHTING IN PARKING AREAS	MINIMUM 1 1/2 FOOT CANDLES THROUGHOUT PARKING AREAS	1.6 FOOT CANDLES
§ 136-23 G.(3)(ii) LIGHTING IN PARKING AREAS	THE LIGHTING LEVEL AT ANY PROPERTY LINE SHALL NOT EXCEED THE MINIMUM. SUCH LIGHTING SHALL BE SHIELDED AND SHALL NOT BE A HAZARD OR OBSTACLE TO THE ADJOINING PROPERTIES OR THE TRAVELING PUBLIC.	COMPLIES
§ 136-23 G.(3)(iii) LIGHTING IN PARKING AREAS	LIGHT FIXTURES SHALL NOT BE HIGHER THAN 16 FEET ABOVE GRADE.	COMPLIES

(M) WAIVER



TYPE 'A' AND 'B' FIXTURE

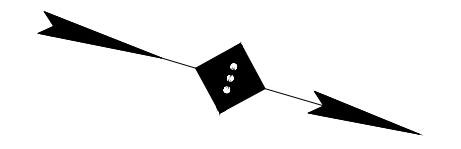
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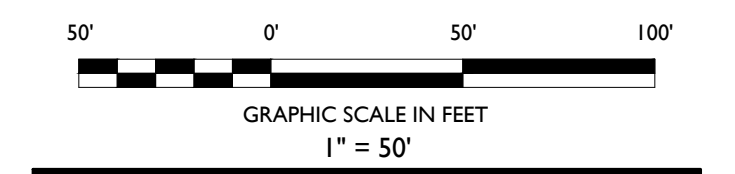
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 • Fax 201.340.4472

NOTES:



#### SITE LEGEND

- PROPERTY BOUNDARY
- - - ADJACENT PROPERTY BOUNDARY
- ===== PROPOSED CURB
- ===== EXISTING CURB
- ===== EXISTING BUILDING
- ===== PROPOSED BUILDING



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NO.	BY	DATE	ISSUE OR REVISION

REVISION:

PROJECT:  
**PROPOSED RESIDENTIAL REDEVELOPMENT**  
150 WALNUT AVENUE  
CRANFORD, N.J.

DRAWING TITLE:

**LIGHTING PLAN  
- PHASE 2 -**

DRAWN BY: JEFFREY A. MARTELL  
CHECK BY: DB  
DATE: 03/21/2017

PROJECT NO.: T-16504  
DRAWING NO.: 20  
C-13

CADD FILE NO.: 13 OF 23



14 OF 23



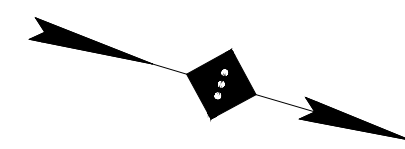
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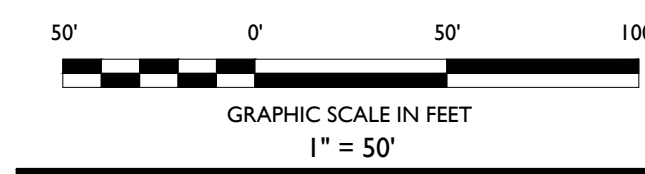


SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING
- LOD
- PROPOSED LIMIT OF DISTURBANCE
- SF
- PROPOSED SILT FENCE
- PROPOSED INLET PROTECTION FILTER

SOIL EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.



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01	DB	02-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION:

PROJECT:  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE:

**SOIL EROSION AND  
SEDIMENT CONTROL PLAN  
- PHASE 2 -**

DESIGNED BY:  
JEFFREY A. MARTELL  
82 PE 4 47293

DATE: 03/21/2017

PROJECT NO.: T-16504

DRAWING BY: DB

CHECK BY: ZC

DWG NO.:

**C-15**

CADD FILE NO. 15 OF 23

SLOPE OF PUBLIC ROADWAY	LENGTH OF STONE REQ'D	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0% TO 2%	50 FEET	100 FEET
2% TO 5%	100 FEET	200 FEET
> 5%	SEE NOTE 4	

- NOTES:
- STONE SHALL BE ASTM C-33, SIZE No. 2 (2.5" TO 1.5") OR No. 3 (2" TO 1") CLEAN CRUSHED ANGULAR STONE.
  - WIDTH SHALL BE 15' MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
  - STORMWATER FROM UP-SLOPE AREAS SHALL BE DIVERTED AWAY FROM THE STABILIZED PAD, WHERE POSSIBLE, AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL BE INSTALLED BEFORE THE STABILIZED CONSTRUCTION ENTRANCE.
  - WHERE THE SLOPE OF THE ROADWAY EXCEEDS 5%, A STABILIZED BASE OF HOT MIX ASPHALT BASE COURSE SHALL BE INSTALLED. THE TYPE AND THICKNESS OF THE BASE COURSE AND USE OF DRAIN GRADED AGGREGATE SUB-BASE SHALL BE AS PRESCRIBED BY LOCAL MUNICIPAL ORDINANCE OR GOVERNING AUTHORITY.
  - CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN THE STABILIZED CONSTRUCTION ACCESS AND THE PUBLIC ROADWAY.

**STABILIZED CONSTRUCTION ACCESS DETAIL**

NOT TO SCALE

**SOIL STOCKPILE DETAIL**

NOT TO SCALE

**SILT FENCE DETAIL**

NOT TO SCALE

**INLET FILTER BAG DETAIL**

NOT TO SCALE

- NOTES:
- THE FILTER BAG SHALL SAFELY PASS FLOWS GREATER THAN THE 1-YEAR 24-HOUR STORM EVENT.
  - SEDIMENT REMOVAL AND MAINTENANCE SHALL BE PERFORMED FREQUENTLY AND AFTER EVERY STORM EVENT.

FOR VEGETATIVE GROUND COVER, IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.

11. IN THAT N.J.S.A. 42A:39 ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISION OF THE CERTIFIED PLANS FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT N.J. STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.

14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.

15. MULCHING TO THE N.J. STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL PERMIT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.

16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.

17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.

18. HYDRO SEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY. GOOD SEED TO SOIL CONTACT AND OVER A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 150 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE N.J. STANDARDS.

19. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SOIL TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

**BASIN COMPACTION NOTES**

1. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

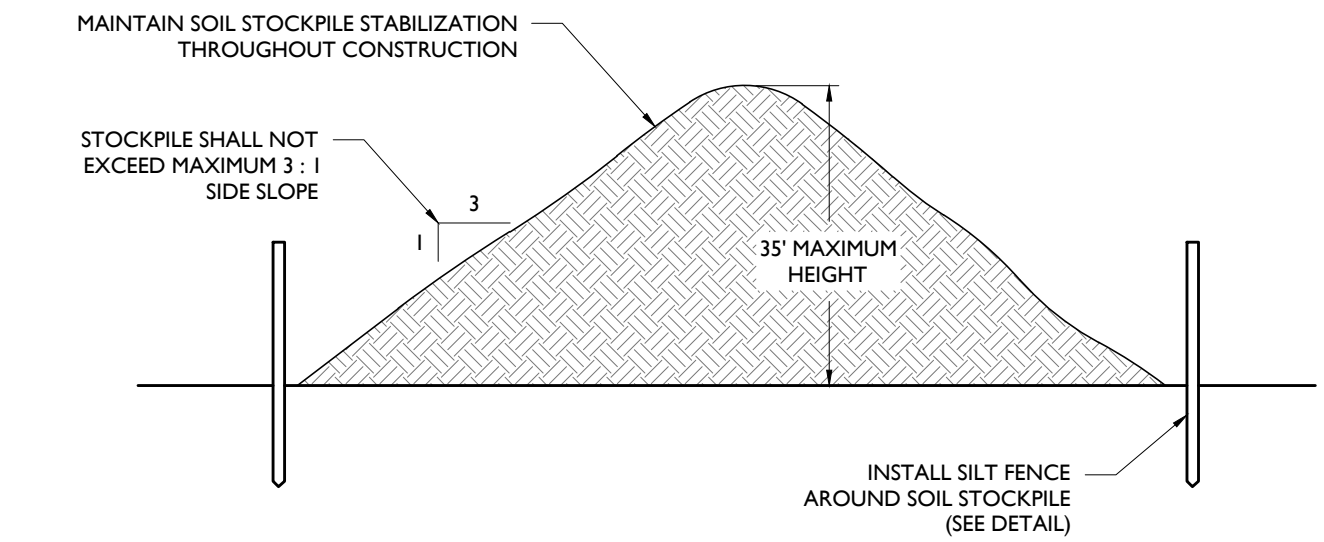
2. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.

3. IMMEDIATELY PRIOR TO TOPDRESSING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

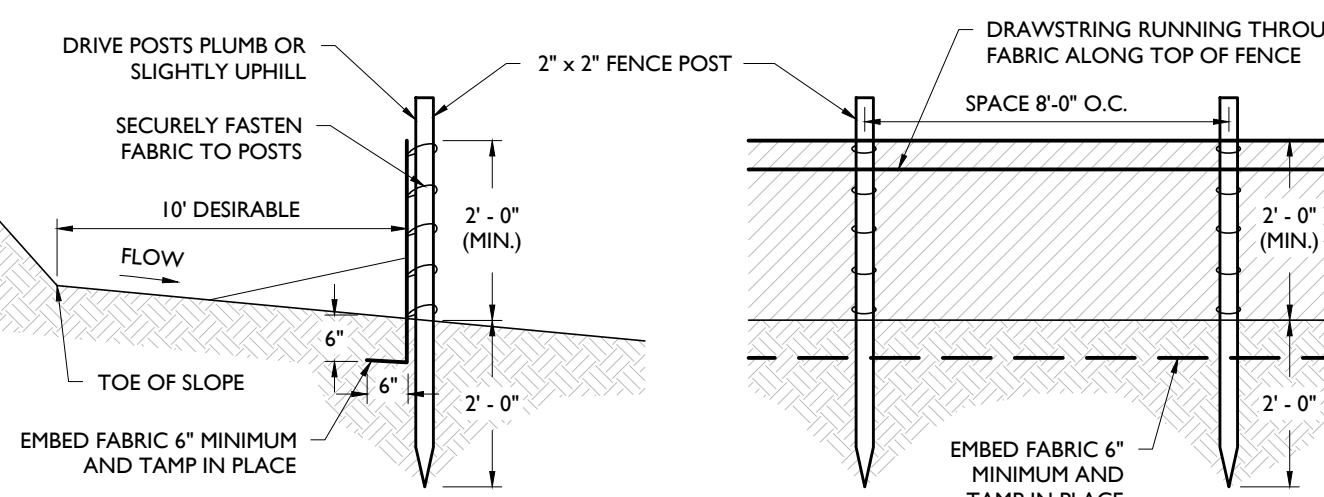
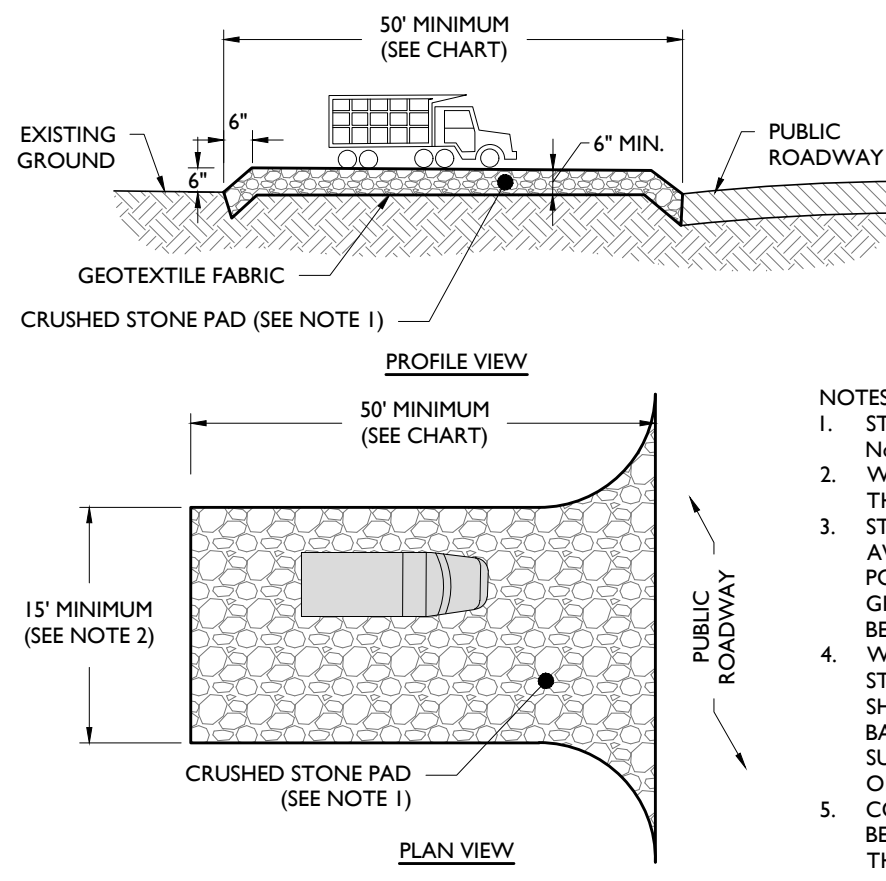
4. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

5. TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE "NORMAL" RUBBER TIRES. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.

6. FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE REVEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGARDING AND LEVELING. SAND OR ORGANIC MATTER CAN BE FILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.



- NOTES:
- STOCKPILES SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
  - STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, AS APPROPRIATE (SEE SOIL EROSION NOTES).



- NOTES:
- SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
  - GEOTEXTILE FABRIC TO BE EMBEDDED 6" (MIN.) AND TAMP IN PLACE.
  - SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
  - SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.

**SOIL EROSION AND SEDIMENT CONTROL NOTES**

1. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.

2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

3. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO N.J. STATE STANDARDS.

4. PERMANENT VEGETATION SHALL BE SEEDING OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.

5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE N.J. STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

6. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.

7. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE N.J. STATE STANDARDS.

8. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E. SLOPES GREATER THAN 3:1).

9. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6" PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.

10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE

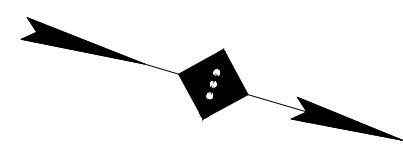




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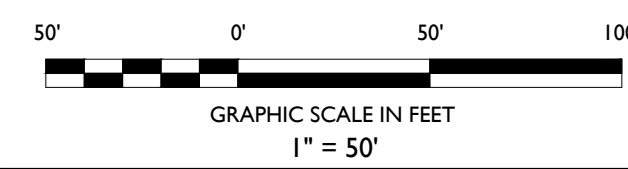
Headquarters: 92 Park Avenue, Rutherford, NJ 07070  
Phone 201.340.4468 · Fax 201.340.4472

NOTES:



LANDSCAPING LEGEND

- PROPERTY BOUNDARY  
--- ADJACENT PROPERTY BOUNDARY



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION:

PROJECT:  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
750 WALNUT  
AVENUE  
GRANFORD, N.J.

DRAWING TITLE:

**OVERALL LANDSCAPING  
PLAN  
- PHASE I -**

DESIGNER:  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE: 03/21/2017

PROJECT NO.: T-16504

DRAWING BY: DB

CHECK BY: ZC

DATE: 03/21/2017

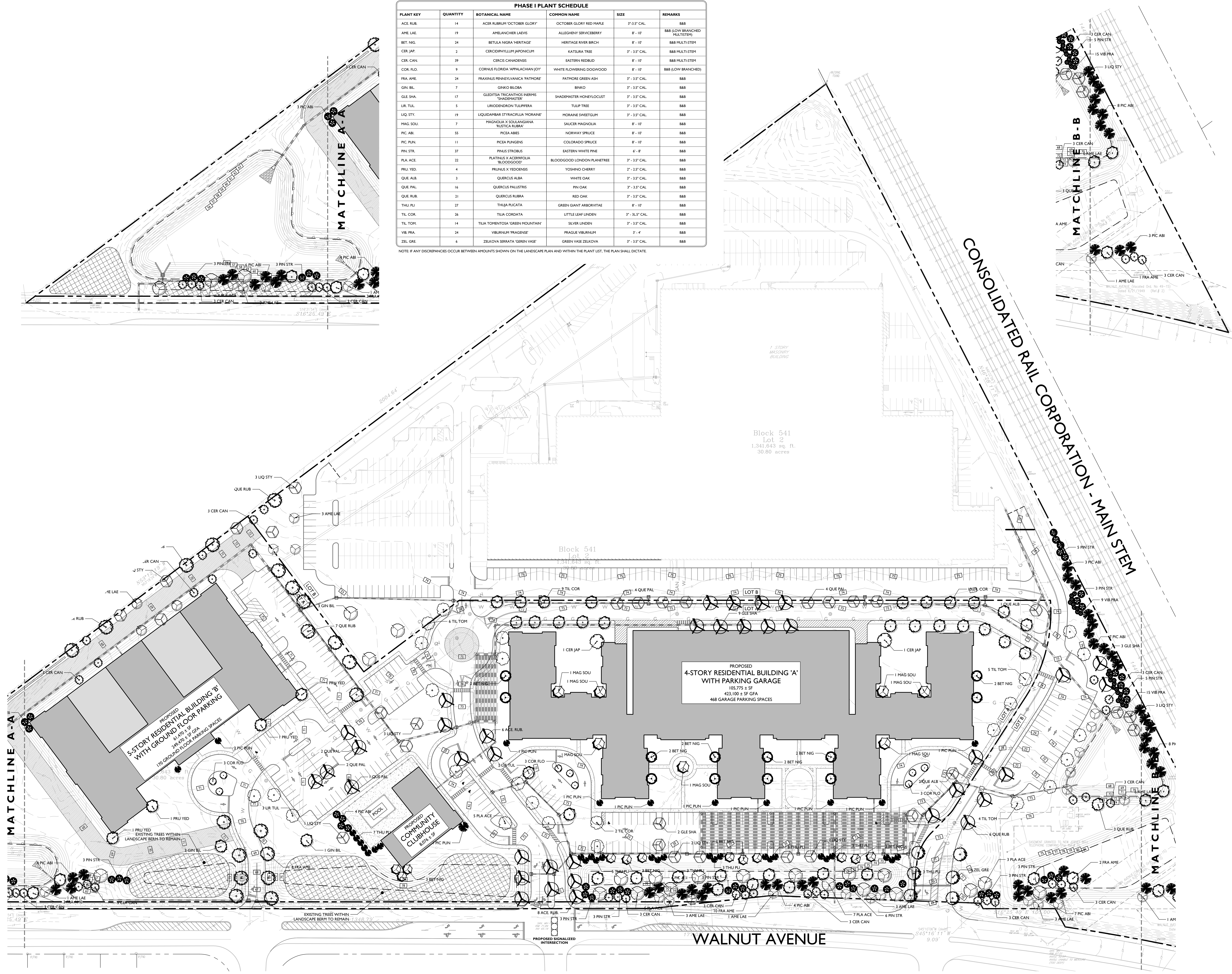
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CADD FILE NO: 16.09.23

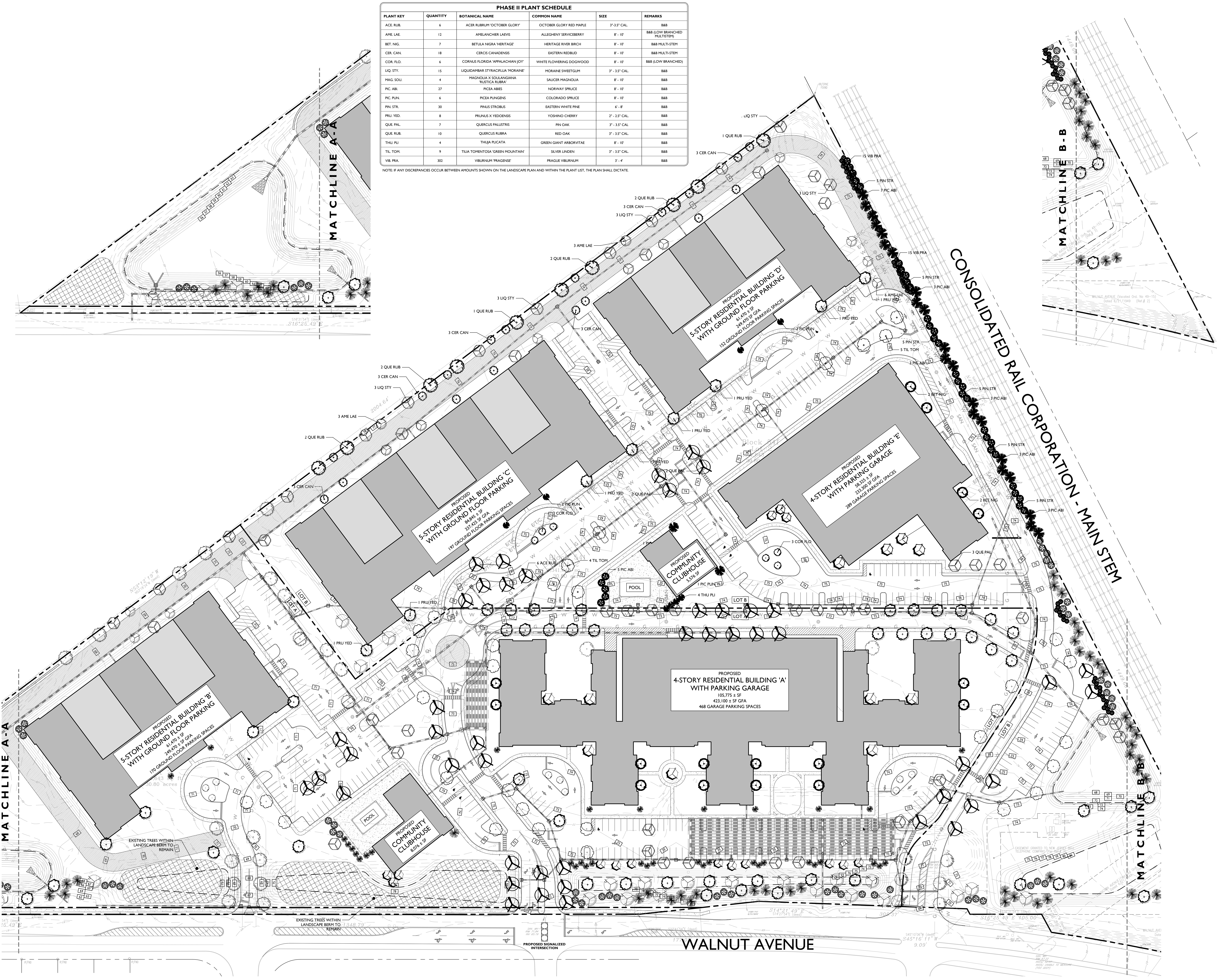
PHASE I PLANT SCHEDULE

PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
ACE. RUB.	14	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3" - 3.5" CAL.	B&B
AME. LAE.	19	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	8" - 10"	B&B (LOW BRANCHED PLANT)
BET. NIG.	24	BETULA NIGRA 'HERITAGE'	HERITAGE RIVER BIRCH	8" - 10"	B&B MULTI-STEM
CER. JAP.	2	CERCIDIPHYLLUM JAPONICUM	KATSURA TREE	3" - 3.5" CAL.	B&B MULTI-STEM
CER. CAN.	39	CERCIS CANADENSIS	EASTERN REDBUD	8" - 10"	B&B MULTI-STEM
COR. FLO.	9	CORNUS FLORIDA 'APPALACHIAN JOY'	WHITE FLOWERING DOGWOOD	8" - 10"	B&B (LOW BRANCHED)
FRA. AME.	24	FRAXINUS PENNSYLVANICA 'PATHOKE'	PATMORE GREEN ASH	3" - 3.5" CAL.	B&B
GIN. BL.	7	GINKGO BILOBA	BINKO	3" - 3.5" CAL.	B&B
GLE. SHA.	17	GLEDITSIA TRICANTHOS INERMIS	SHADEMASTER HONEYLOCUST	3" - 3.5" CAL.	B&B
UR. TUL.	5	LIRIODENDRON TULIPIFERA	TULIP TREE	3" - 3.5" CAL.	B&B
LIQ. STY.	19	LIQUIDAMBAR STYRACIFLUA 'MORANIE'	MORANIE SWEETGUM	3" - 3.5" CAL.	B&B
MAG. SOU.	7	MAGNOLIA X SOULANGIANA 'RUSTICA RUBRA'	SAUCER MAGNOLIA	8" - 10"	B&B
PIC. ABI.	55	PICEA ABIES	NORWAY SPRUCE	8" - 10"	B&B
PIC. PUN.	11	PICEA PUNGENS	COLORADO SPRUCE	8" - 10"	B&B
PIN. STR.	37	PINUS STROBUS	EASTERN WHITE PINE	6" - 8"	B&B
PLA. ACE.	22	PLATANUS X ACERIFOLIA 'BLOODGOOD'	BLOODGOOD LONDON PLANETREE	3" - 3.5" CAL.	B&B
PRU. YED.	4	PRUNUS X YEDOENSIS	YOSHINO CHERRY	2" - 2.5" CAL.	B&B
QUE. ALB.	3	QUERCUS ALBA	WHITE OAK	3" - 3.5" CAL.	B&B
QUE. PAL.	16	QUERCUS PAULSTRIS	PIN OAK	3" - 3.5" CAL.	B&B
QUE. RUB.	21	QUERCUS RUBRA	RED OAK	3" - 3.5" CAL.	B&B
THU. PL.	27	THUJA PLICATA	GREEN GIANT ARBORVITAE	8" - 10"	B&B
TIL. COR.	26	TILIA CORDATA	LITTLE LEAF LINDEN	3" - 3.5" CAL.	B&B
TIL. TOM.	14	TILIA TOMENTOSA 'GREEN MOUNTAIN'	SILVER LINDEN	3" - 3.5" CAL.	B&B
VIB. PRA.	24	VIBURNUM 'PRAGENSE'	PRAGUE VIBURNUM	3" - 4"	B&B
ZEL. GRE.	6	ZELKOVA SERRATA 'GEREN VASE'	GREEN VASE ZELKOVA	3" - 3.5" CAL.	B&B

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE







PHASE II PLANT SCHEDULE					
PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
ACE RUB.	6	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3" - 3.5" CAL.	B&B
AME LAE.	12	AMELANCHIER LARVIS	ALLEGHENY SERVICEBERRY	8' - 10'	B&B (LOW BRANCHED MULTISTEM)
BET. NIG.	7	BETULA NIGRA 'HERITAGE'	HERITAGE RIVER BIRCH	8' - 10'	B&B MULTI-STEM
CER. CAN.	18	CERCIS CANADENSIS	EASTERN REDBUD	8' - 10'	B&B MULTI-STEM
COR. FLO.	6	CORNUS FLORIDA 'APPALACHIAN JOY'	WHITE FLOWERING DOGWOOD	8' - 10'	B&B (LOW BRANCHED)
LIQ. STY.	15	LIQUIDAMBAR STYRACIFLUA 'MORANE'	MORANE SWEETGUM	3" - 3.5" CAL.	B&B
MAG. SOLI.	4	MAGNOLIA X SOULANGIANA 'LUSTICA RUBRA'	SAUCER MAGNOLIA	8' - 10'	B&B
PIC. ABI.	27	PICEA ABIES	NORWAY SPRUCE	8' - 10'	B&B
PIC. PLN.	6	PICEA PUNGENS	COLORADO SPRUCE	8' - 10'	B&B
PIN. STR.	30	PINUS STROBUS	EASTERN WHITE PINE	6' - 8'	B&B
PRU. YED.	8	PRUNUS X YEDOENSIS	YOSHINO CHERRY	2" - 2.5" CAL.	B&B
QUE. PAL.	7	QUERCUS PALUSTRIS	PIN OAK	3" - 3.5" CAL.	B&B
QUE. RUB.	10	QUERCUS RUBRA	RED OAK	3" - 3.5" CAL.	B&B
THU. PLI.	4	THUJA PLICATA	GREEN GIANT ARBORVITAE	8' - 10'	B&B
TIL. TOM.	9	TILIA TOMENTOSA 'GREEN MOUNTAIN'	SILVER LINDEN	3" - 3.5" CAL.	B&B
VIB. PRA.	302	VIBURNUM 'PRAGENSE'	PRAGUE VIBURNUM	3' - 4'	B&B

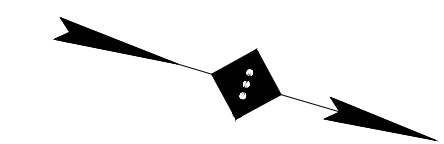
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

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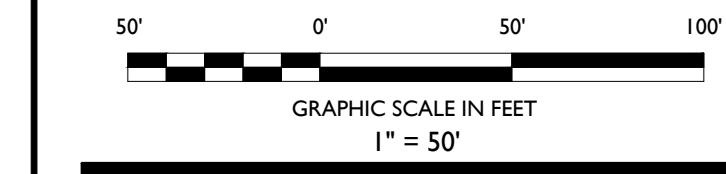
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**LANDSCAPING LEGEND**

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY



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REVISION:

PROJECT:  
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REDEVELOPMENT**  
750 WALNUT  
AVENUE  
GRANFORD, N.J.

**OVERALL LANDSCAPING  
PLAN  
- PHASE 2 -**

DESIGNER:  
JEFFREY A. MARTELL  
812 PE 4 47290

DATE: 03/21/2017

PROJECT NO.: T-16504  
DRAWING BY: DB  
CHECK BY: ZC  
DWG NO.:  
**C-17**  
CADD FILE NO.: 17 OF 23



EXISTING TREES ONSITE		
PLOT	SPECIES	TREE DIAMETER
A	PINE	12"
A	PINE	12"
A	PINE	12"
A	PINE	12"
A	HONEYLOCUST	12"
A	HONEYLOCUST	12"
A	HONEYLOCUST	12"
A	BLUE SPRUCE	8"
A	HONEYLOCUST	12"
A	HONEYLOCUST	12"
A	PINE	12"
A	DOGWOOD	6"
A	DOGWOOD	6"
A	IRONWOOD	6"
A	IRONWOOD	6"
A	IRONWOOD	6"

PLOT A: BUFFER AREA ALONG WALNUT AVENUE FRONTAGE.

TOTAL TRACT AREA  
1,327,759 SF (30.48 AC)  
TOTAL WOODED AREA ALONG WALNUT AVENUE  
(19,377 SF (0.51 AC)  
TOTAL WOODED AREA TO BE REMOVED  
59,613 SF (0.55 AC) (AREA OF WOODED ACRES)  
WOODED ACRE SAMPLE PLOT  
WOODED AREA SAMPLE: 11,700 SF (0.27 AC)  
MULTIPLICATION FACTOR: 2.51 AC / 0.27 AC = 9.3

TREES EQUAL TO OR GREATER THAN OR EQUAL TO 6" BUT LESS THAN 12"  
TOTAL TREES WITH DBH EQUAL TO OR GREATER THAN 6" AND LESS THAN 12" WITHIN WOODED ACRE SAMPLE PLOTS: 7 TREES  
ESTIMATED TOTAL TREES WITH A DBH EQUAL TO OR GREATER THAN 6" AND LESS THAN 12" ON SITE: 7 x 9.3 = 65 TREES  
TREES EQUAL TO OR GREATER THAN OR EQUAL TO 12" BUT LESS THAN 18"  
TOTAL TREES WITH DBH EQUAL TO OR GREATER THAN 12" AND LESS THAN 18" WITHIN WOODED ACRE SAMPLE PLOTS: 10 TREES  
ESTIMATED TOTAL TREES WITH A DBH EQUAL TO OR GREATER THAN 12" AND LESS THAN 18" ON SITE: 10 x 9.3 = 93 TREES  
TOTAL TREES ESTIMATE ON SITE: 65 + 93 = 158 TREES

### TREE REPLACEMENT CALCULATIONS

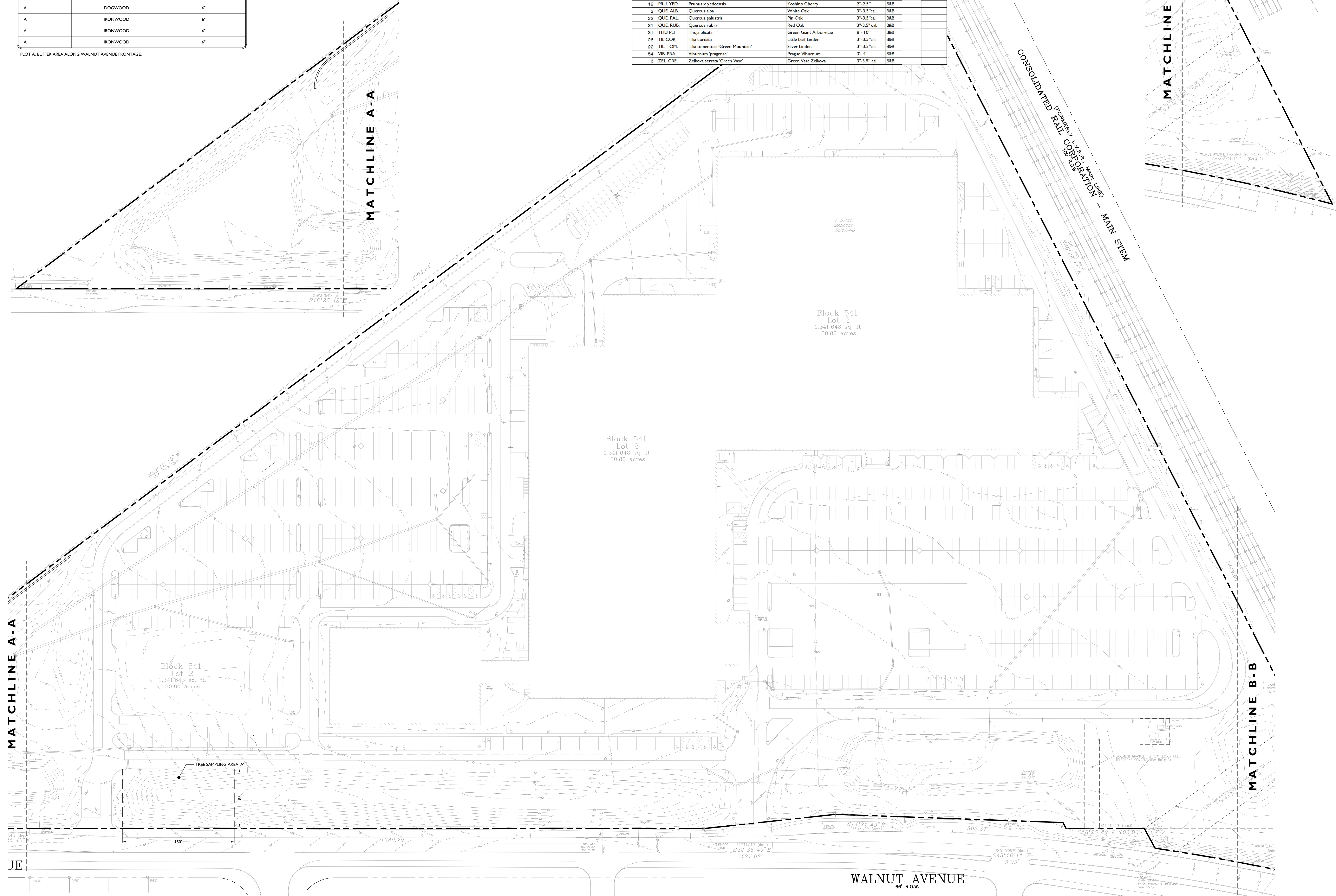
DBH REQUIRED	ESTIMATED TOTAL TREES REMOVED FOR REPLACEMENT		TOTAL
	QTY. REMOVED	REQUIRED PER TREE	
BETWEEN 6"-12"	35	3	105
BETWEEN 12-18"	51	4	204
TOTAL:	86		309

\*FORMULAS USED TO OBTAIN ESTIMATE OF QUANTITY OF REMOVED TREES:  
TREES WITHIN SAMPLE PLOTS X 9.3 = TOTAL TREES ON SITE  
TOTAL TREES ON SITE X % SITE REMOVED = QUANTITY OF TREES REMOVED

309 REPLACEMENT TREES ARE REQUIRED

TOTAL TREES REQUIRED TO BE REPLACED: 309 TREES  
TOTAL NUMBER OF REPLACEMENT TREES: 363 TREES

OVERALL PLANT LIST			
TREES & SHRUBS			
QUANTITY	PLANT KEY	BOTANICAL NAME	COMMON NAME
22	ACE. RUB.	Acer rubrum 'October Glory'	October Glory Red Maple
24	AME. LAE.	Amelanchier laevis	Allegheny Serviceberry
31	BET. NIG.	Betula nigra 'Heritage'	Heritage River Birch
2	CER. JAP.	Cercidiphyllum japonicum	Katsura-tree
42	CER. CAN.	Cercis canadensis	Eastern Redbud
15	COR. FLO.	Cornus florida 'Appalachian Joy'	White Flowering Dogwood
11	FRA. AME.	Fraxinus pennsylvanica 'Pamora'	Pamora Green Ash
7	GIN. BIL.	Ginkgo Biloba	Ginkgo
17	GLE. SHA.	Gleditsia tricanthos inermis 'Shademaster'	Shademaster Honeylocust
6	LR. TUL.	Liriodendron tulipifera	Tulip Tree
34	LIQ. STY.	Liquidambar styraciflua 'Moraine'	Moraine Sweetgum
11	MAG. SCOU.	Magnolia x soulangiana 'Rustica Rubra'	Saucer Magnolia
62	PIC. ABI.	Picea abies	Norway Spruce
17	PIC. PUN.	Picea pungens	Colorado Spruce
58	PIN. STR.	Pinus strobus	Eastern White Pine
11	PLA. ACE.	Platanus x acerifolia 'Bloodgood'	Bloodgood London Planetree
12	PRU. YED.	Prunus x yedoensis	Yoshino Cherry
3	QUE. ALB.	Quercus alba	White Oak
22	QUE. PAL.	Quercus palustris	Pin Oak
31	QUE. RUB.	Quercus rubra	Red Oak
31	THU. PLI.	Thuja plicata	Green Giant Arborvitae
26	TIL. COR.	Tilia cordata	Little Leaf Linden
22	TIL. TOM.	Tilia tomentosa 'Green Mountain'	Silver Linden
54	VIB. PRA.	Viburnum 'pragense'	Prague Viburnum
6	ZEL. GRE.	Zelkova serrata 'Green Vase'	Green Vase Zelkova

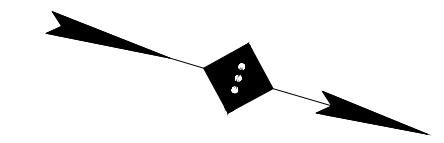


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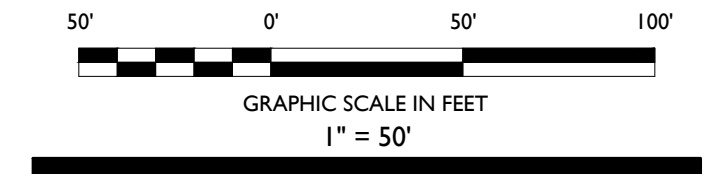
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REVISION :

PROJECT :  
**PROPOSED RESIDENTIAL  
REDEVELOPMENT**  
750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

### TREE REPLACEMENT PLAN

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290  
DATE : 03/21/2017  
PROJECT NO. : T-16504  
DRAWING BY : DB  
CHK BY : ZC  
DWG NO. :  
CADD FILE NO. :  
18 OF 23

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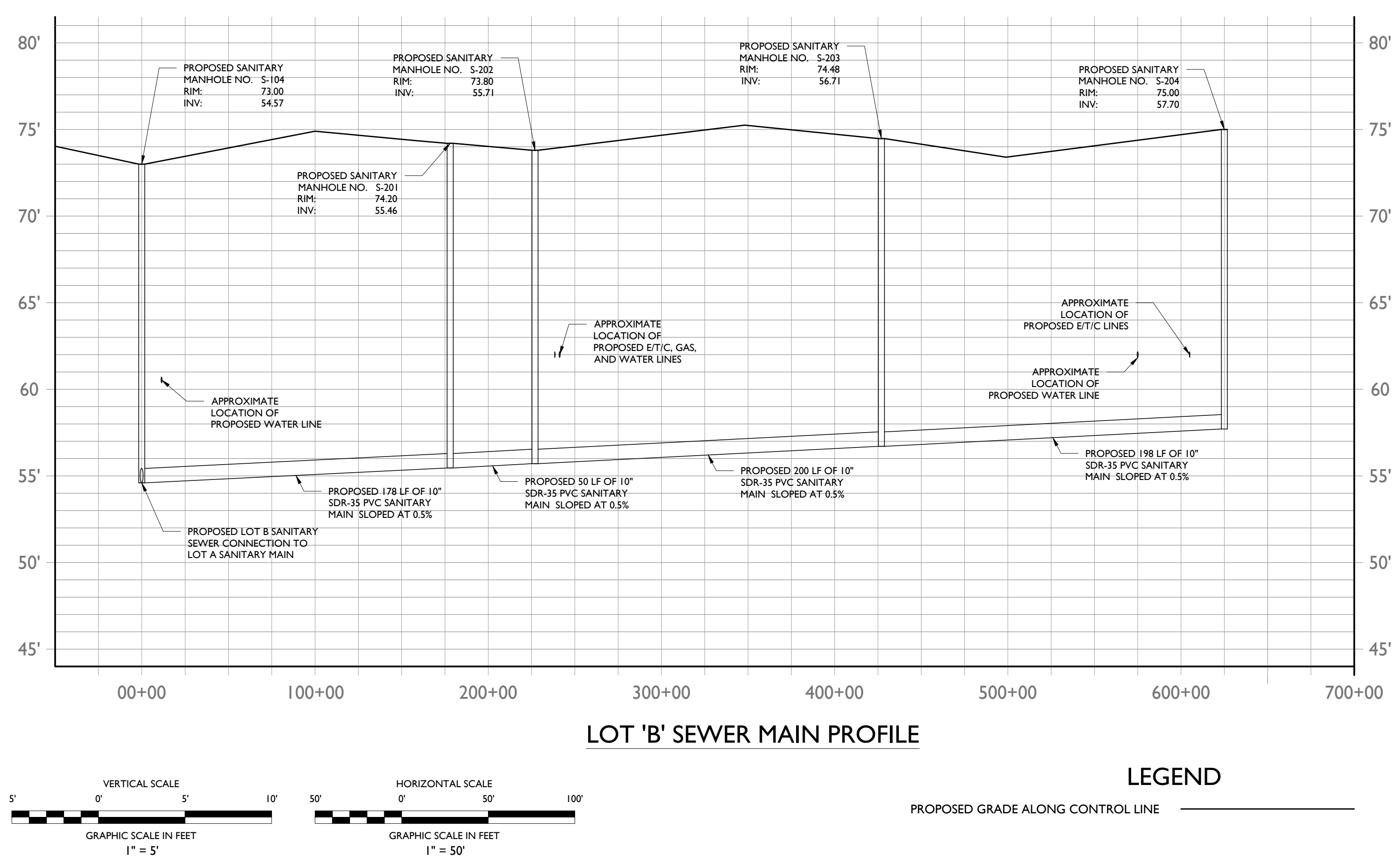
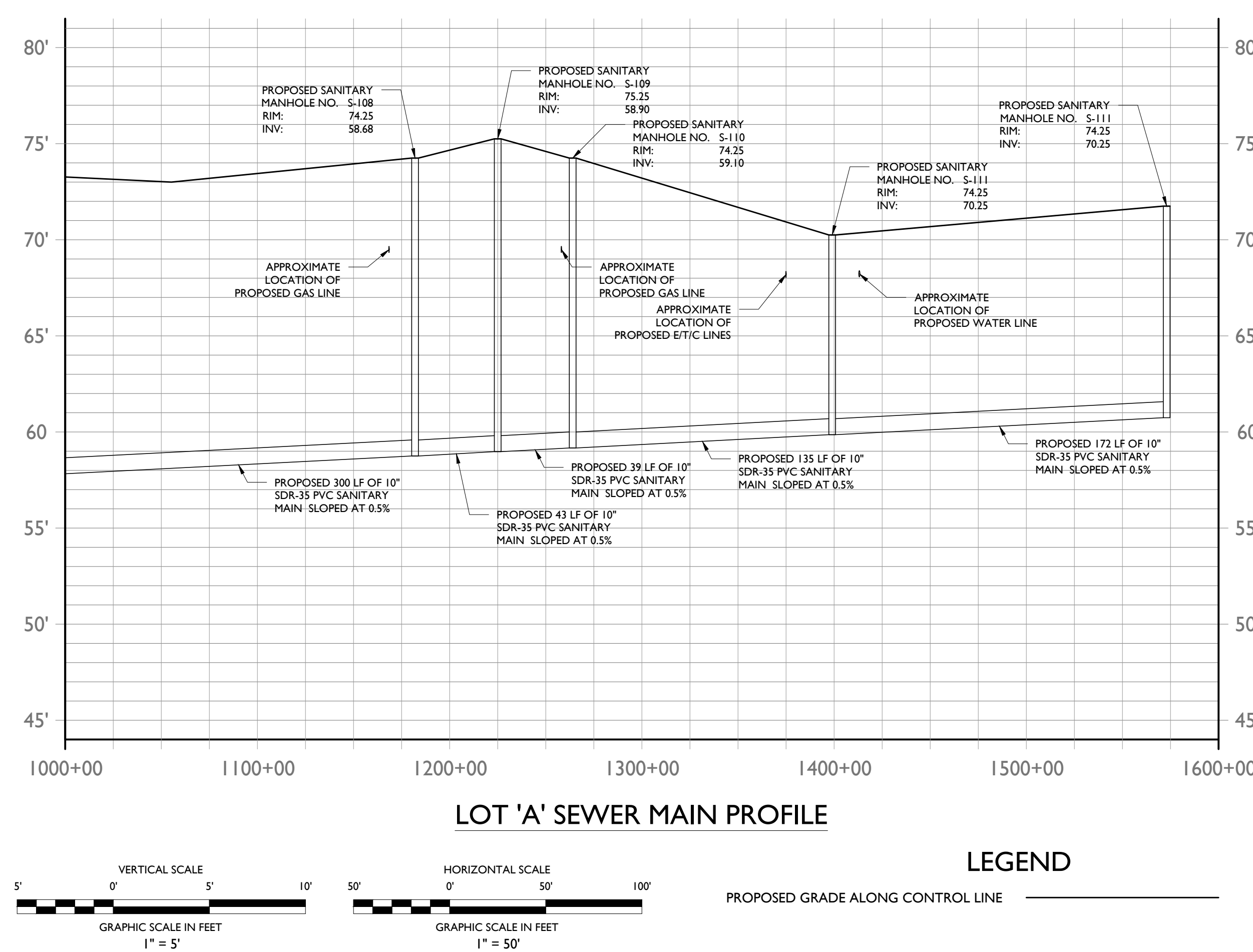
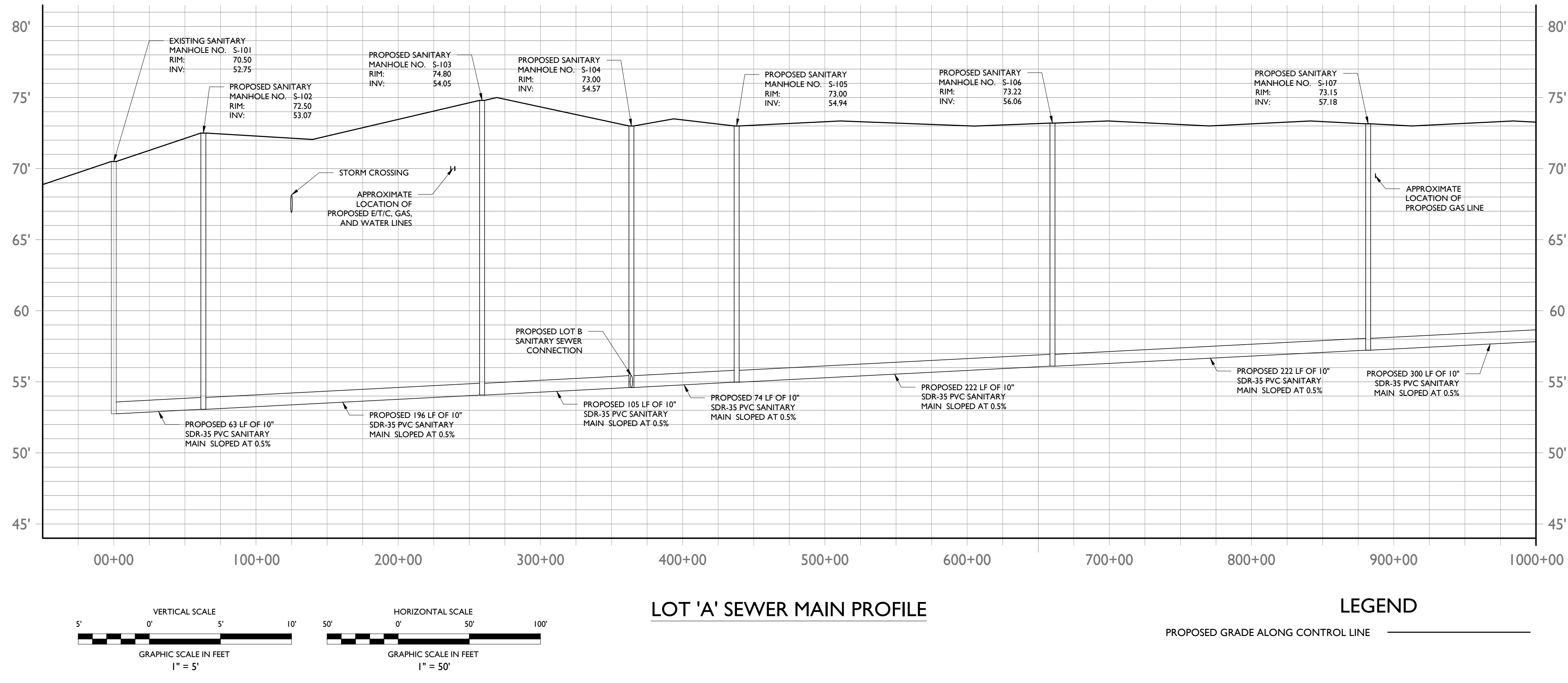




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GRANFORD, N.J.

DRAWING TITLE :

**SANITARY MAIN PROFILES**

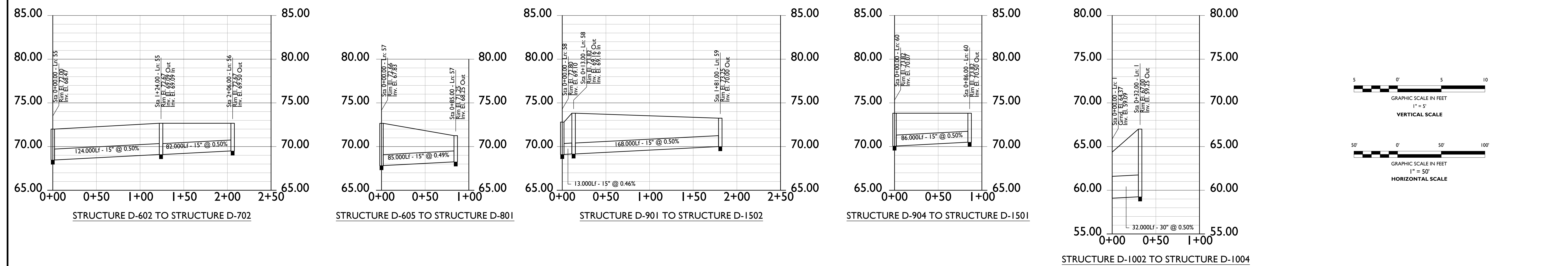
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JEFFREY A. MARTELL  
812 PE 4 47290


DATE : 05/21/2017  
PROJECT NO. : T-16504  
DRAWING BY: DB  
CHK BY: ZC  
DWG NO. : **C-19**  
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19 OF 23

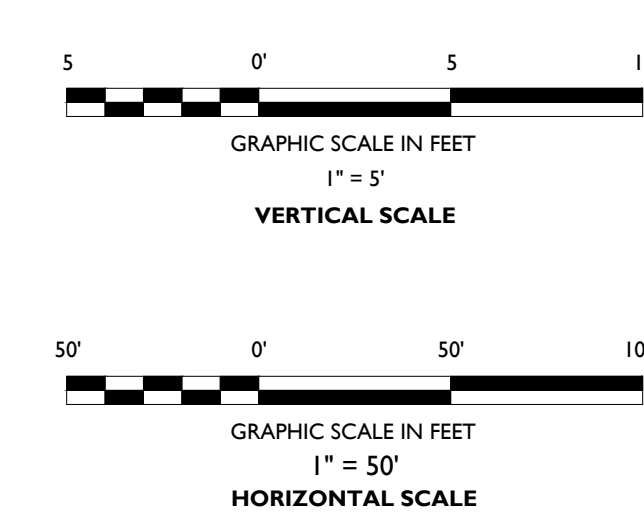


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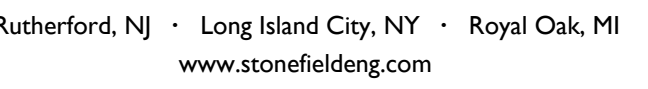


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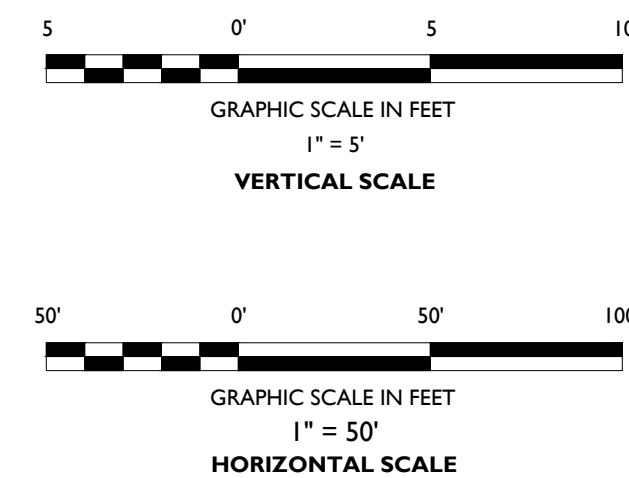
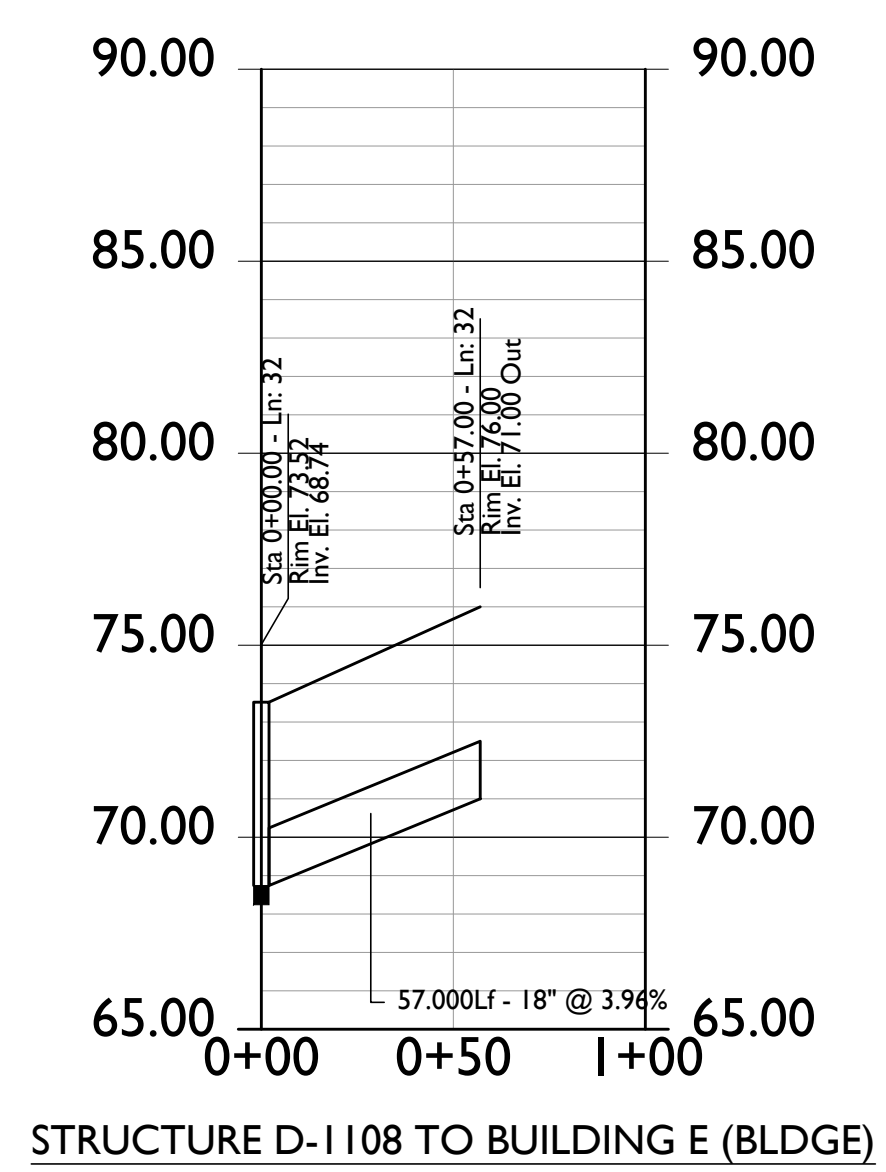
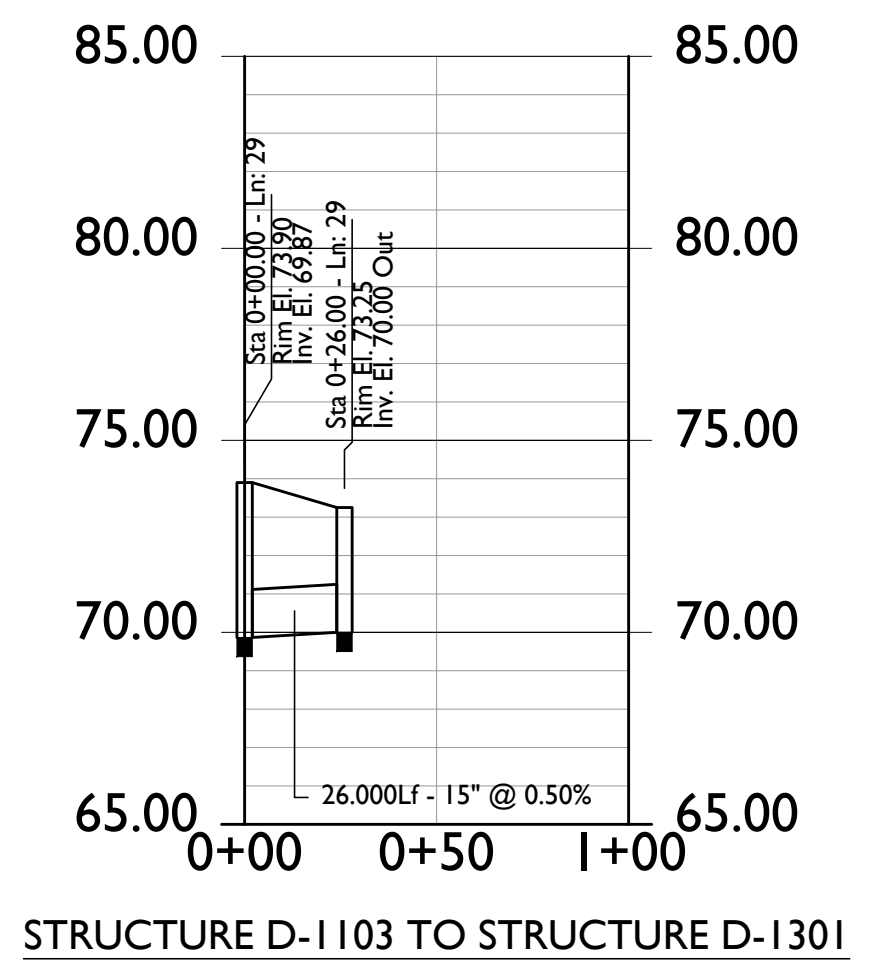


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750 WALNUT  
AVENUE  
CRANFORD, N.J.

DRAWING TITLE :

## STORMWATER PROFILES

ENGINEER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE: 03/21/2017

PROJECT NO.: T-16509

DRAWING BY: DB

CHK BY: ZC

DWG NO:

C-21

## Q21

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21 OF 23



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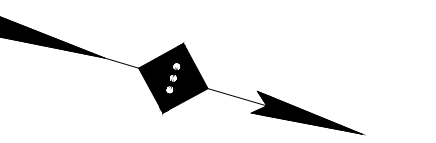
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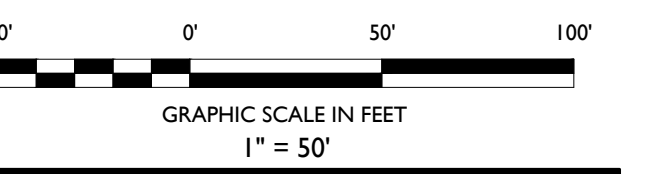
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NOTES :



SITE LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



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REVISION :

PROJECT :

PROPOSED RESIDENTIAL  
REDEVELOPMENT

750 WALNUT  
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CRANFORD, N.J.

DRAWING TITLE :

FIRE TRUCK  
TURNING PLAN

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE : 03/21/2017

PROJECT NO. : T-16504

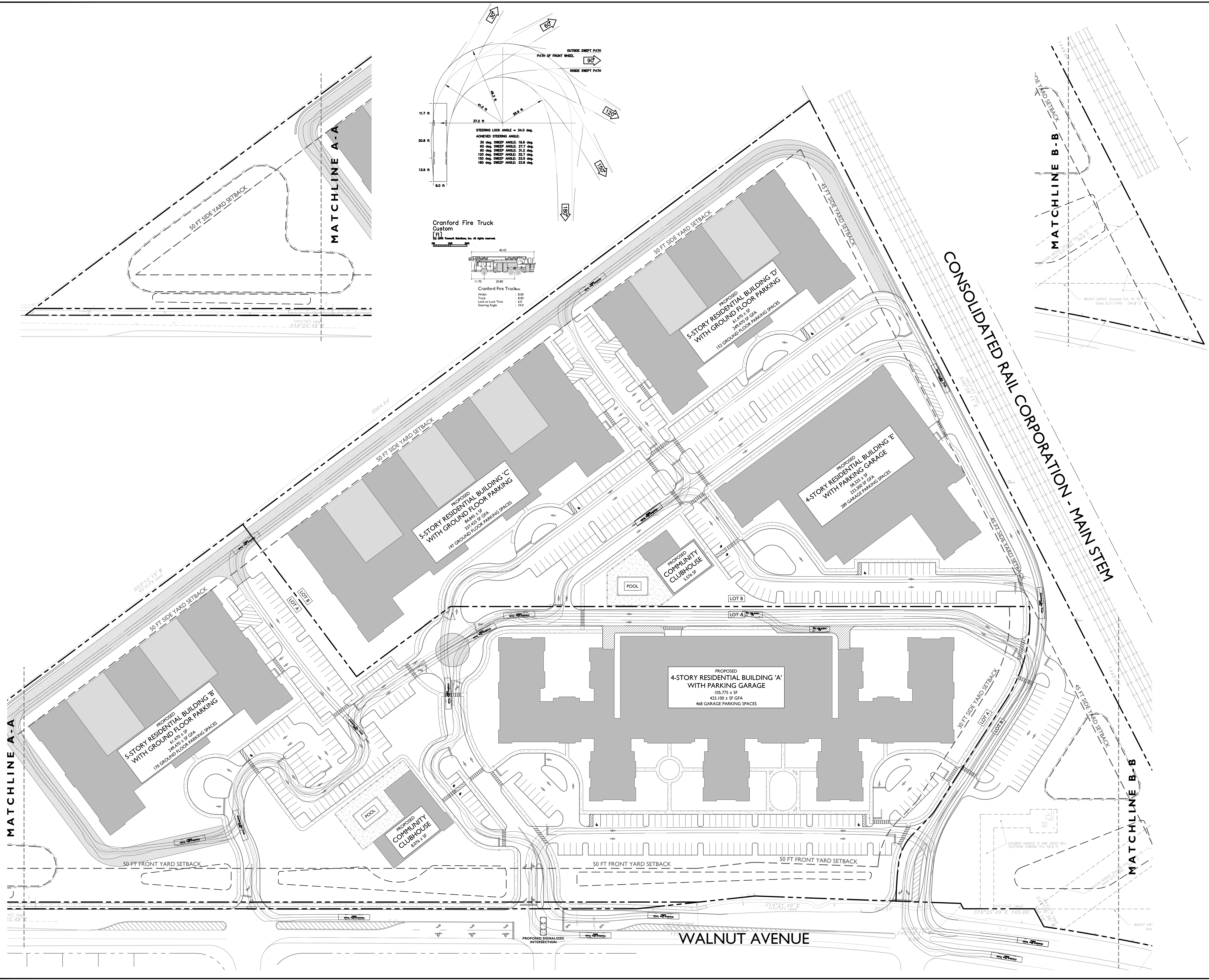
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CHECK BY : ZC

DATE : 03/21/2017

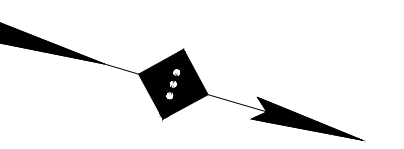
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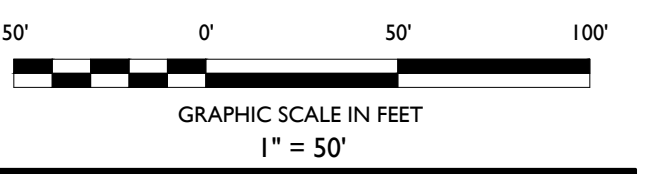


NOTES:



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- PROPOSED CURB
- EXISTING CURB
- EXISTING BUILDING
- PROPOSED BUILDING



03	DD	11-28-18	REVISED PER PLANNING BOARD COMMENTS
02	AA	05-24-17	REVISED PER DRC MEETING
01	DB	03-21-17	SUBMITTED TO TOWNSHIP
NO.	BY	DATE	ISSUE OR REVISION

REVISION:

PROJECT:

**PROPOSED RESIDENTIAL  
REDEVELOPMENT**

750 WALNUT  
AVENUE  
GRANFORD, N.J.

DRAWING TITLE:

**DELIVERY TRUCK  
TURNING PLAN**

DESIGNER  
JEFFREY A. MARTELL  
NJ PE # 47290

DATE: 03/21/2017

PROJECT NO.: T-16504

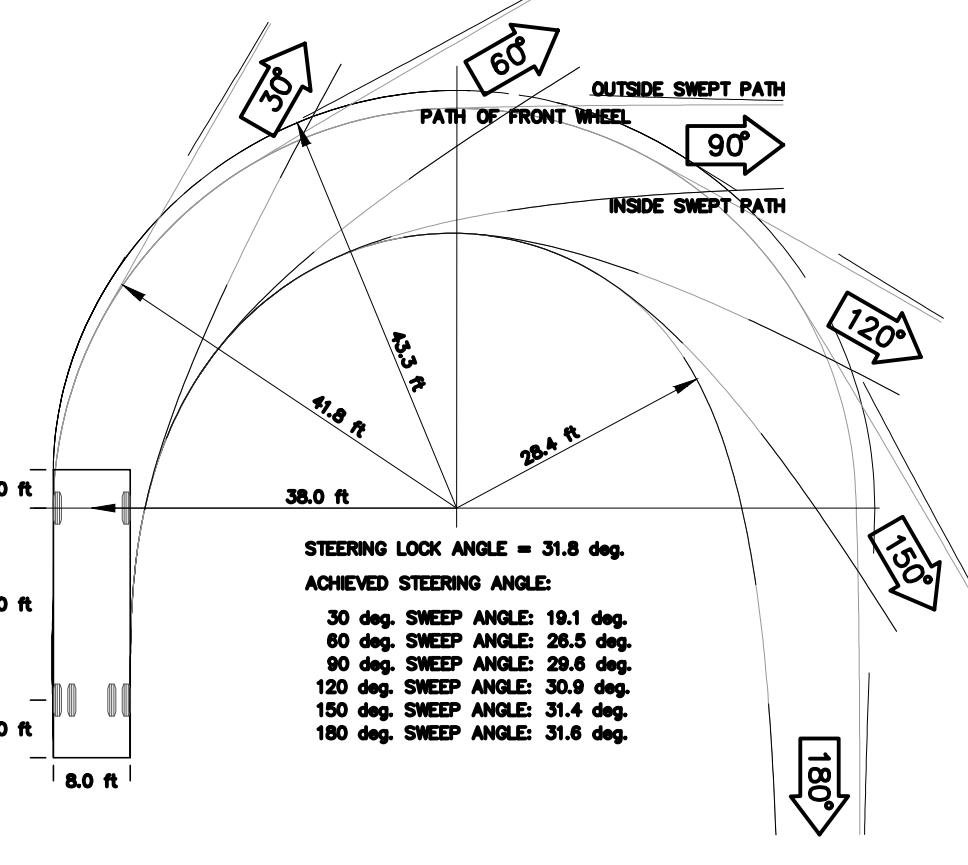
DRAWING BY: DB

CHECK BY: ZC

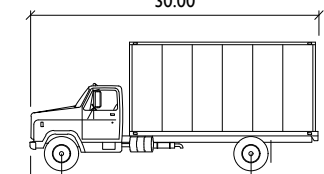
DATE: 03/21/2017

**C-23**

CADD FILE NO.: 23 OF 23



SU-30  
AASHTO 2011 (US)  
[ft]  
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SU-30	Inc.
Width	8.00
Truck	8.00
Lock to Lock Time	4.00
Steering Angle	31.8

