A105

Typical Floor "A" Floor Plan

Design Team

Truss Engineering

Group #1

Johnny Chunyue Wong
cyw299@nyu.edu
Team Leader

Matjusz Chrobak
mjc836@nyu.edu

Mohammed Haque
mh3281@nyu.edu

Owner

NYU Tandon School of Engineering
Department of Civil and Urban Engineering

Wael Fouad Moussa
Wael.Moussa@nyu.edu

Project

Metro Center

100 West 57th St
New York, NY 10019

Typical Floor "A" Floor Plan

Owner

NYU Tandon School of Engineering

Design Team

Truss Engineering

Group #1

Johnny Chunyue Wong

Matjusz Chrobak

Mohammed Haque

Consulting Engineers

Department of Civil & Urban Engineering

Wael Fouad Moussa

Scale

1/8" = 1'-0"
1. THE LATEST EDITION OF THE FOLLOWING ACI STANDARDS APPLY:

- ASTA WRS-95 
- ASTM F1554, GRADE 55 TYPE S1 (UNO) 
- SHAPES & WT RANGES

2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATING TO EXISTING SHAPES & WT RANGES.

3. CONCRETE SLUMP IS TAKEN AT POINT OF PLACEMENT INTO STRUCTURE.

6. THE GENERAL CONTRACTOR SHALL COMPARE AND COORDINATE THE DRAWINGS OF ALL EXISTING DRAWINGS FOR DETAILED REQUIREMENTS.

8. WHERE CONFLICTS EXIST BETWEEN STRUCTURAL DOCUMENTS THE STRICTEST REQUIREMENTS, AS INDICATED BY THE STRUCTURAL ENGINEER SHALL GOVERN.

11. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORAGE, ENHANCED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

12. SUBMIT FOR REVIEW SHOP DRAWINGS OF STEEL DETAILS PRIOR TO FABRICATING ANY STEEL STRUCTURAL DETAILS.

14. STEEL COLUMNS, BASE PLATES AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" REINFORCEMENT.

28. STEEL PIPE.

ASTM A500, GRADE B

C-CAUSE DAMAGE TO ADJACENT BUILDINGS, UTILITIES, OR OTHER PROPERTY. THIS HSS SHAPES

COMPRESSIVE MAX. SLUMP

B. FOUNDATION WALLS

4000 4/4" 0.45 3

CONTRACTOR MUST PROVIDE NOTIFICATION TO THE ERECTOR THAT, BY TESTING, THE

10. THE CONTRACTOR SHALL PROVIDE ONE SHOP COAT OF PRIMER (TYPICALLY PRIME) FOR ALL EXISTING CONSTRUCTION.

HOT DIPPED GALVANIZED OR SPRAY FIREPROOFED. DO NOT PAINT PORTIONS EMBEDDED IN

12. CONCRETE SLAB ON GRADE SHALL BE CHAFFERED WHERE SHOWN ON THE CONTRACTUAL DRAWINGS AT STRUCTURAL STEEL CONNECTIONS.

13. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAFFERED WHERE SHOWN ON THE CONTRACTUAL DRAWING OR STRUCTURAL STEEL DETAILS.

11. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORAGE, ENHANCED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

12. SUBMIT FOR REVIEW SHOP DRAWINGS OF STEEL DETAILS PRIOR TO FABRICATING ANY STEEL STRUCTURAL DETAILS.

14. STEEL COLUMNS, BASE PLATES AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" REINFORCEMENT.

28. STEEL PIPE.

ASTM A500, GRADE B

C-CAUSE DAMAGE TO ADJACENT BUILDINGS, UTILITIES, OR OTHER PROPERTY. THIS HSS SHAPES

COMPRESSIVE MAX. SLUMP

B. FOUNDATION WALLS

4000 4/4" 0.45 3

CONTRACTOR MUST PROVIDE NOTIFICATION TO THE ERECTOR THAT, BY TESTING, THE

10. THE CONTRACTOR SHALL PROVIDE ONE SHOP COAT OF PRIMER (TYPICALLY PRIME) FOR ALL EXISTING CONSTRUCTION.

HOT DIPPED GALVANIZED OR SPRAY FIREPROOFED. DO NOT PAINT PORTIONS EMBEDDED IN

12. CONCRETE SLAB ON GRADE SHALL BE CHAFFERED WHERE SHOWN ON THE CONTRACTUAL DRAWINGS AT STRUCTURAL STEEL CONNECTIONS.

13. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAFFERED WHERE SHOWN ON THE CONTRACTUAL DRAWING OR STRUCTURAL STEEL DETAILS.

11. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORAGE, ENHANCED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

12. SUBMIT FOR REVIEW SHOP DRAWINGS OF STEEL DETAILS PRIOR TO FABRICATING ANY STEEL STRUCTURAL DETAILS.

14. STEEL COLUMNS, BASE PLATES AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" REINFORCEMENT.
NOTES:
1. BUILDING DATUM ELEVATION 0' 0" IS EQUAL TO ACTUAL ELEVATION 64.97'. ALL ELEVATIONS SHOWN ON PLANS REFER TO DATUM ELEVATION.
2. 6' X 6' COLLEGES ARE 12" DEEP WITH 6" PROJECTIONS ON EACH SIDE AND ARE CENTERED UNDER WALLS UNTIL UNLESS OTHERWISE NOTED ON PLAN.
3. ALL CONTINUOUS FOOTINGS SHALL BE X' X" DEEP WITH X" PROJECTIONS ON EACH SIDE AND ARE CENTERED UNDER WALLS UNTIL UNLESS OTHERWISE NOTED ON PLAN.
4. ESTIMATED BOTTOM OF FOOTING DATUM ELEVATIONS SHOWN ON PLAN.
5. ALL SPREAD FOOTINGS SHALL BE CENTERED UNDER COLLEGE ABOVE OR WHERE NO COLLEGE OCCURS.
6. ALL SPREAD FOOTINGS SHALL BE CENTERED UNDER WALL ABOVE UNLESS OTHERWISE NOTED ON PLAN.
7. FOR FOOTING SCHEDULE SEE THIS DRAWING.
8. FOR FOUNDATION TYPICAL DETAILS SEE DRAWING S-500.
9. FOR COLUMN SCHEDULE SEE DRAWING S-400.

FOOTING SCHEDULE

<table>
<thead>
<tr>
<th>FOOTING</th>
<th>WIDTH</th>
<th>DEPTH</th>
<th>MARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>F6</td>
<td>3' x 3'</td>
<td>1'</td>
<td>3-46</td>
</tr>
<tr>
<td>F11</td>
<td>3' x 3'</td>
<td>2'</td>
<td>5-47</td>
</tr>
<tr>
<td>F16</td>
<td>3' x 3'</td>
<td>3'</td>
<td>8-48</td>
</tr>
<tr>
<td>F21</td>
<td>3' x 3'</td>
<td>3'</td>
<td>10-48</td>
</tr>
<tr>
<td>F22</td>
<td>3' x 3'</td>
<td>4'</td>
<td>13-49</td>
</tr>
<tr>
<td>F24</td>
<td>3' x 3'</td>
<td>5'</td>
<td>15-49</td>
</tr>
</tbody>
</table>

NORTH
NOTES:

1. TOP OF SLAB ELEVATION SHALL BE -15' -0".

2. DENOTES SPAN DIRECTION OF 3 3/4" THICK 4000 PSI LIGHT WEIGHT CONCRETE ON 1.5VL 8/19 V-LOOZ METAL DECK WITH 1/4" X 1/4" WIRE MESH. TOTAL THICKNESS = 5 1/4".

3. TOP OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.

4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

6. FOR RAMP PARTIAL FRAMING PLAN SEE DWG S-102 GROUND FLOOR FRAMING PLAN.
TOP OF SLAB ELEVATION SHALL BE 0'.

1. DENOTES SPAN DIRECTION OF 3 3/4" THICK 4000 PSI LIGHT WEIGHT CONCRETE ON 1.5VL R19 VULCRAFT METAL DECK WITH 1/8" WIRE MESH. TOTAL THICKNESS ~ 5 1/4".

2. TOB OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.

3. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

4. DENOTES TRUSS CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
1. Top of slab elevation shall be 16'-0".

2. Denotes span direction of 3 3/4" thick 4000 psi lightweight concrete on 1.5vl 8.79 v-lock metal deck with 1/4" by 7/8" wind mesh, total thickness = 1 3/4".

3. Top of steel beam shall be 5 1/4" below top of slab unless otherwise noted.

4. Denotes moment connection. Detail shown in separate sheet.

5. Denotes brace connection. Detail shown in separate sheet.
1. TOP OF SLAB ELEVATION SHALL BE 32'-0".
2. DENOTES SPAN DIRECTION OF 3 3/4" THICK 4000 PSI LIGHT WEIGHT CONCRETE ON 1.5VL R19 VULCRAFT METAL DECK WITH IN BAT 6"
3. TOB OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED
4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
1. TOP OF SLAB ELEVATION SHOWN BELOW.
2. DENOTES SPAN DIRECTION OF 3 3/4" THICK LIGHTWEIGHT CONCRETE ON 1.5" X 3/4" I-JOIST METAL DECK (WITH 1/4" BIRNICH). TOTAL THICKNESS = 5 1/4".
3. TOP OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.
4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
1. TOP OF SLAB ELEVATION SHOWN BELOW.

2. DENOTES SPAN DIRECTION OF 3 3/4" THICK LIGHT WEIGHT CONCRETE ON 1.5" R19 VULCRAFT METAL DECK WITH 1/4" WIRE MESH. TOTAL THICKNESS = 5 1/4".

3. TOB OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.

4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

NOTES:

1. TOP OF SLAB ELEVATION SHOWN BELOW.

2. DENOTES SPAN DIRECTION OF 3 3/4" THICK LIGHT WEIGHT CONCRETE ON 1.5" R19 VULCRAFT METAL DECK WITH 1/4" WIRE MESH. TOTAL THICKNESS = 5 1/4".

3. TOB OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.

4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
NOTES:
1. TOP OF SLAB ELEVATION SHALL BE 200'-0".

2. DENOTES SPAN DIRECTION OF 3 3/4" THICK 4000 PSI LIGHT WEIGHT CONCRETE ON 1.5VL R19 VULCRAFT METAL DECK WITH 1/2" WIRE MESH. TOTAL THICKNESS = 5 3/4".

3. TOP OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.

4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.

5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
NOTES:
1. TOPEOF SLAB ELEVATION SHALL BE 214'-0".
2. DENOTES SPAN DIRECTION OF 3 3/4" THICK 4000 PSI LIGHTWEIGHT CONCRETE ON 1.5" R19 VULCAN METAL DECK WITH 1/2" WIRE MESH TOTAL THICKNESS = 5 1/4".
3. TOE OF STEEL BEAM SHALL BE 5 1/4" BELOW TOP OF SLAB UNLESS OTHERWISE NOTED.
4. DENOTES MOMENT CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
5. DENOTES BRACE CONNECTION. DETAIL SHOWN IN SEPARATE SHEET.
NOTES:
1. TOP OF SLAB ELEVATION ShOWN BELOW.
   - Denotes span direction of 3 3/4" thick 4000 PSI lightweight concrete on 1.5V1 R19 Vulcraft metal deck with 1.5" by 6" wind mesh. Total thickness = 5 1/4".
   - Top of steel beam shall be 5 1/4" below top of slab unless otherwise noted.
2. Denotes moment connection. Detail shown in separate sheet.
3. Denotes brace connection. Detail shown in separate sheet.
NOTES:
1. FACADE SYSTEM PROVIDED BY TECNICAL GLASS PRODUCTS.
2. FACADE SYSTEM SPECIFICATIONS SHOW STEEL-BUILT CURTAIN WALL 45 MM SYSTEM.
# Column Schedule

<table>
<thead>
<tr>
<th>ELEVATION</th>
<th>A-1</th>
<th>A-2</th>
<th>A-3</th>
<th>A-4</th>
<th>A-5</th>
<th>A.2-2.1</th>
<th>A.2-3</th>
<th>A.2-4</th>
<th>A.2-5</th>
<th>A.6-3</th>
<th>A.6-4</th>
<th>A.6-5</th>
<th>B-1</th>
<th>B-2</th>
<th>B-2.1</th>
<th>B-3</th>
<th>B-4</th>
<th>B-5</th>
<th>B-5.8</th>
<th>B-6</th>
<th>B.4-3</th>
<th>B.4-4</th>
<th>B.4-5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- Column Schedule Key:
  - COL. SIZE: Column Size
  - LOAD IN KIPS: Load in Kips

**Column Schedule 1 of 3**

<table>
<thead>
<tr>
<th>COL. SIZE</th>
<th>LOAD IN KIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>W8x18</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
<tr>
<td>W10x33</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
<tr>
<td>W12x96</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
<tr>
<td>W12x106</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
<tr>
<td>W14x145</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
<tr>
<td>W14x193</td>
<td>1/8&quot; = 1'-0&quot;</td>
</tr>
</tbody>
</table>

**Design Team:**
- NYU TANDON SCHOOL OF ENGINEERING
- TRUSS ENGINEERING GROUP
  - Johnny Churchill Wong
  - Mateusz Gabor
  - Mohammed Haque

**Consulting Engineers:**
- Department of Civil & Urban Engineering
- Walid Abo Moussa
  - Mirek Milkis

**Project:**
- 6 MetroTech Center
- 145 West 57th St
- New York, NY 10019

**Drawn by:** Mateusz Chrobak
**Checked by:** Johnny Wong

**Date:** 12/14/2017
**Scale:** 1/8" = 1'-0"
### Column Schedule

#### Design Team
- C-1 C-2 C-3 C-4 C-5 C-5.8 C-6 D-1 D-2 D-2.1 D-3 D-4 D-5 D-5.8 D-6 D-7-3 D-7-4 D-7-5 D-8-2.1 D-8-3 D-8-4 D-8-5 D-8-5.8

#### Floor Levels
- **17th - Roof**: 242' 0"
- **16th**: 201 216 108 26 228' 0"
- **15th**: 152 351 180 W10 X 49 W14 X 49 W14 X 82 W14 X 99 W14 X 132
- **11th - 12th**: 158' 0" 1089 937 1078 632 795 1114
- **10th**: 727 935 1535 925 W14 X 90 W14 X 159
- **9th**: 1022 840 1058 W14 X 233 W14 X 233 W14 X 233 W14 X 257
- **5th**: 1230 1257 1579 1635 W14 X 283
- **2nd**: 16' 0" 4661 4198 1640 1511 224 1463 3602 3247
- **Cellar**: 100 WEST 57TH ST NEW YORK, NY 10019

#### Column Schedule Key
- 1/8" = 1'-0" Column Schedule 2 of 3

#### Dimensions
- Elevation: C1 C2 C2.1 C3 C4 C5 C5.8 C6 C8 C8.1 C9 C10 C10.8 C11 C12 C12.8 C13 C14 C14.8 C15

#### Notes
- 1. Column Schedule Key:
  - Column Schedule 2 of 3
- Columns: C1-C14.8
- 1/8" = 1'-0"
# Column Schedule

## Column Elevation

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Col. 1</th>
<th>Col. 2</th>
<th>Col. 3</th>
<th>Col. 4</th>
<th>Col. 5</th>
<th>Col. 6</th>
<th>Col. 7</th>
<th>Col. 8</th>
<th>Col. 9</th>
<th>Col. 10</th>
<th>Col. 11</th>
<th>Col. 12</th>
<th>Col. 13</th>
<th>Col. 14</th>
<th>Col. 15</th>
<th>Col. 16</th>
<th>Col. 17</th>
<th>Col. 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-15'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-30'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>116'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>158'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172'-0&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Notes

1. Column Schedule Key:
   - COL. SIZE: COL. SIZE IN FT/IN
   - NOTE: NOTATION OF COMPRESSION LOADS IN KIPS
   - COL. SIZE: COL. SIZE IN FT/IN

---

The column schedule represents the dimensions and design loads for the structural columns within the specified elevations. Each column is identified by its elevation and is categorized by its size and load capacity. The data is organized to facilitate the understanding of the structural integrity and load distribution throughout the construction project.
OF COLUMN & GIRDER OF COLUMN
TEE SECTION TO MATCH SIZE
OF COL. CUT AND ADJUST TO
ALIGN W/ COL. FLANGES

FITTED STIFFENER PL. AS
REQUIRES TO ALIGN W/ COL. FLANGES

FITTED STIFFENER PL. AS
REQUIRES TO ALIGN W/ COL. FLANGES

ADD 4-9/16" BOLTS IN BEARING
SUPPORT CONNECTION 1/2"-HOLE IN
STIFFENER PL.

1" THICK (MIN.) CAP PL. W/ (4) 7/8" DIA. A325 SC BOLTS (MIN.)

FITTED STIFFENER PL. EA.
SIDE (4 THUS) THICKNESS TO
MATCH COL. FLANGE. ALIGN
PLATES W/ FLANGES

1/2" MIN. STIFFENER

NOTE: FOR ADDITIONAL CONNECTION REQUIREMENTS AND INFORMATION NOT SHOWN SEE
TYPICAL BRACE CONNECTION AT COLUMN FLANGE DETAIL ON THIS DRAWING.

1/2" MIN. STIFFENER

WELD SHEAR PL. TO TOP FLANGE AS
REQUIRES TO DEVELOP 100% HORIZ.
COMPONENT OF BRACE FORCE

WELD SHEAR PL. TO TOP FLANGE AS
REQUIRES TO DEVELOP 100% HORIZ.
COMPONENT OF BRACE FORCE

NOTES TO DEVELOP 100% HORIZ.
COMPONENT OF BRACE FORCE

EXTENDING SHEAR PL. AS REQUIRES TO
DEVELOP VERT. COMPONENT OF BRACE FORCE INTO
SUPPORT BEAM.

SUPPORT BEAM SAME DEPTH
SUPPORT BEAM DEEPER

SHEAR PLATE THICKNESS = 5/16" MIN.
WELD SHEAR PL. TO TOP FLANGE W/ 1/4" FILLET WELD WHEN BEAM
FRAMES TO ONLY ONE SIDE (W16 &
GREATER) AND FOR ALL BEAMS W24
& GREATER

NOTE: FOR ADDITIONAL CONNECTION REQUIREMENTS AND INFORMATION NOT SHOWN SEE
TYPICAL BRACE CONNECTION AT COLUMN FLANGE DETAIL ON THIS DRAWING.

SHEAR PLATE THICKNESS = 5/16" MIN.
WELD SHEAR PLATE TO TOP FLANGE AS
REQUIRES TO DEVELOP 100% HORIZ.
COMPONENT OF BRACE FORCE

WELD SHEAR PLATE TO TOP FLANGE AS
REQUIRES TO DEVELOP 100% HORIZ.
COMPONENT OF BRACE FORCE&W ECCENTRICITY

WORK POINT
1/2" MIN. STIFFENER

NOTE: FOR ADDITIONAL CONNECTION REQUIREMENTS AND INFORMATION NOT SHOWN SEE
TYPICAL BRACE CONNECTION AT COLUMN FLANGE DETAIL ON THIS DRAWING.

1/2" MIN. STIFFENER

WORK POINT
1/2" MIN. STIFFENER

TYPICAL DETAILS:

3/4" = 1'-0"

1. Typical Beam on Top of Column
2. Typical Beam to Girder Connection
3. Typical Cantilever Beam Connection
4. Typical Brace Connection - Column Base
5. Typical Brace Connection - Column Web
6. Typical Brace Connection - Column Hanger
NOTE: SEE COLUMN SCHEDULE FOR BASE PLATE THICKNESS (t). THICKNESS GIVEN IS MILLED THICKNESS. MILL BASE PLATE IF THICKNESS IS GREATER THAN 2".

2" Ø GROUT HOLE EA. SIDE

4" MIN.

(4) 3/4" Ø ANCHOR BOLTS U.O.N. SEE COL. SCHED.

TOP OF CONC. FOOTING, PIER, WALL, ETC.

CLOSURE PLATE

C OF COLUMN & GIRDER

FACED EDGE PLATE

CLOSURE PLATE

SPRAY ON FIREPROOFING

SEEN ARCH. DET.

TRANSFER GIRDER DESIGN CONNECTION FOR ECCENTRICITY BEAM WHERE APPLICABLE

SHEAR PLATE THICKNESS = T

STD HOLES IN PLATE AND BEAM

FITTED STIFFENER PL. EA. SIDE (4 THUS) THICKNESS TO MATCH COLUMN FLANGE ALIGN PLS. W/ FLANGES

BEAM WHERE APPROPRIATE

2" NON-SHRINK GROUT (IF LEVELING PL. IS OMITTED)

BASE PLATE THICKNESS = t

COLUMN WEB PARALLEL TO GIRDER

COLUMN WEB PERPENDICULAR TO GIRDER

THE SECTION TO MATCH SIZE OF COLUMN, CUT W/HOLE SHAPE MATCH WITH COLUMN FLANGES

TRANSFER GIRDER

BEAM PERPENDICULAR TO GIRDER

COLUMN WEB PERPENDICULAR TO GIRDER

WHERE 'A' EXCEEDS 3" PROVIDE #3x2'-6" @12" TOP TYP. DIM. 'A' 2"+-

SPRAY-ON FIREPROOFING

SEE ARCH. DET.

NOTE: FACE OF CLOSURE PLATE SHALL BE ALIGNED TO OBTAIN FINISHED SHAFT LOCATION. ALL CLOSURE PLATES SHALL BE TO THE NEW METAL DECK DESIGN. FORMED AND REPLACED BY THE METAL DECK CONTRACTOR. "SHAFT" REFERS TO ALL ELEVATOR SHAFTS AS WELL AS ALL MECHANICAL, ELECTRICAL AND CONVEYOR SHAFTS.

NOTE: FOR BALANCE OF INFORMATION SEE TYPICAL FLOOR CONSTRUCTION DETAILS.

NOTE: SEE TYPICAL BEAM TO GIRDER CONNECTION FOR BALANCE OF INFORMATION.

NOTE: SEE TYPICAL COLUMN CONNECTION FOR BALANCE OF INFORMATION.

1) Typical Column Base

2) Typical Column Transfer

3) Typical Edge at Stairs, Shafts, etc.

4) Typical Floor Construction

5) Typical End Connection to Spandrel Beams or Stair Hangers

6) Typical Reinforcing Over Girders or at Change in Deck Direction

Scale

Project number

DWG NO.

Drawn by

Checked by

CONSULTING ENGINEERS:

DEPARTMENT OF CIVIL & URBAN ENGINEERING

Juha Aho Mousa

Mark Milkis

Johnny Chwen Ye Wong

cyw299@nyu.edu

Team Leader

Mateusz Chrobak

mjc836@nyu.edu

Mohammed Haque

mh3281@nyu.edu

100 WEST 57TH ST

NEW YORK, NY 10019

OWNER

NYU TANDON SCHOOL OF ENGINEERING

6 METROTECH CENTER

BROOKLYN, NY 11201

DESIGN TEAM

TRUSS ENGINEERING GROUP IP

JOHNNY CHWEN YE WONG

cyw299@nyu.edu

Team Leader

MATEUSZ CHROBAK

mjc836@nyu.edu

MOHAMMED HAQUE

mh3281@nyu.edu

OWNER

NYU TANDON SCHOOL OF ENGINEERING

6 METROTECH CENTER

BROOKLYN, NY 11201

DATE

12/14/2017

12:15:10 AM

Typical Details
**Typical Footing & Column Baseplate**

1. See Column Schedule for Base Plate Size and Thickness.
2. Base Plate if Thickness is Greater Than 3/4".

**3/4" Non-Shrink Grout**

- 1/4" Thick Leveling Pl. (Optional)

**Footings**

- Size to match base plate

**3/4" DIA. ('d') Anchor Bolts Min. U.O.N.**

**Std. Hook**

- Base Plate

**Column & Footing**

- 1/4" Thick Leveling Pl. (Optional)

**NOTES:**

1. See Column Schedule for Base Plate Size and Thickness.
2. Mill Base Plate if Thickness is Greater Than 2".