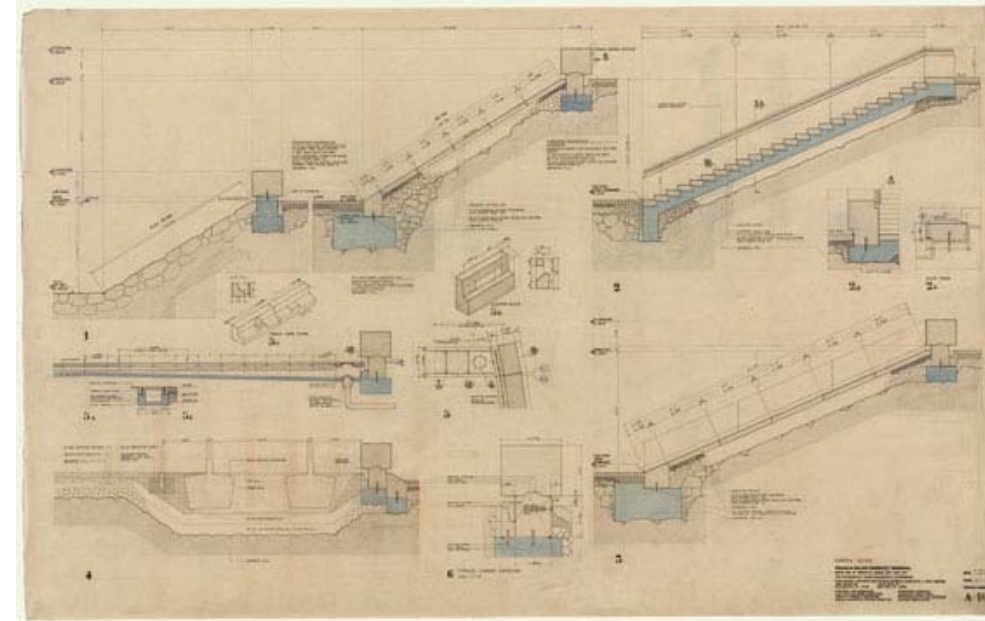
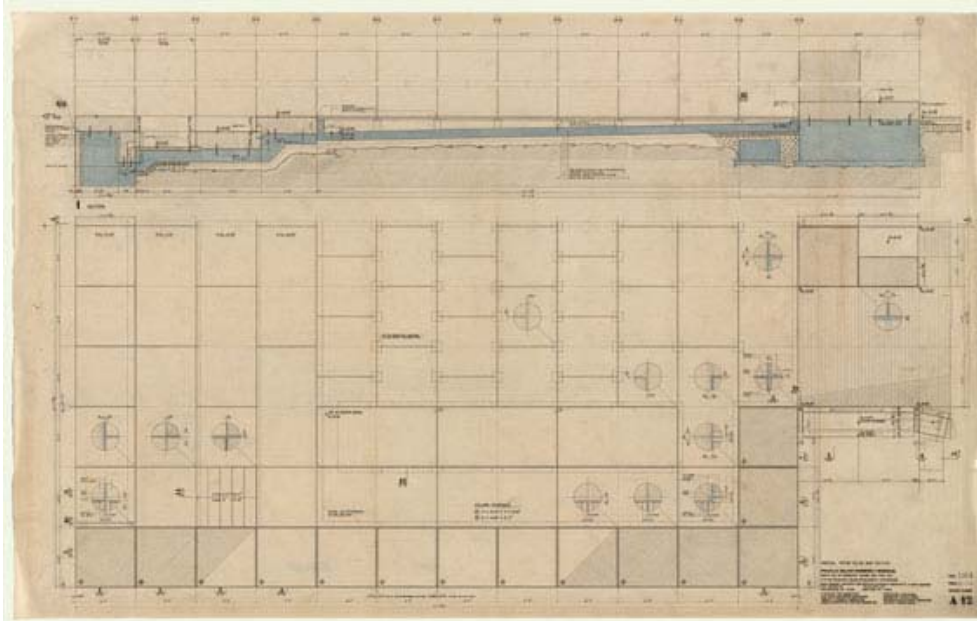
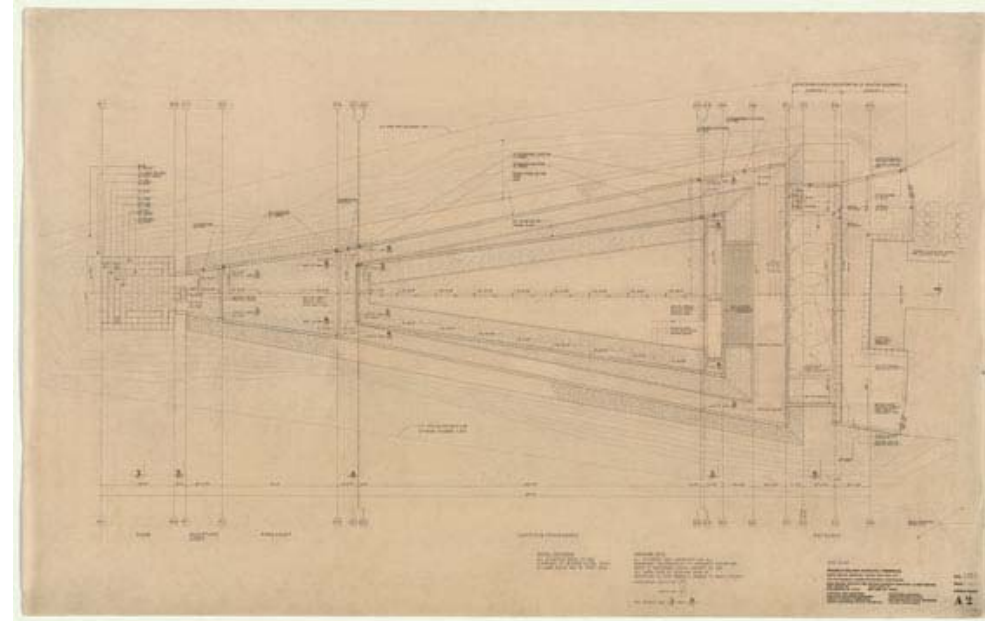


# CMCE 1110: Construction Drawings I

Professor Anderson  
[nanderson@citytech.cuny.edu](mailto:nanderson@citytech.cuny.edu)

REFERENCE: D.K.CHING, ARCHITECTURAL GRAPHICS



# DRAWING STANDARDS:

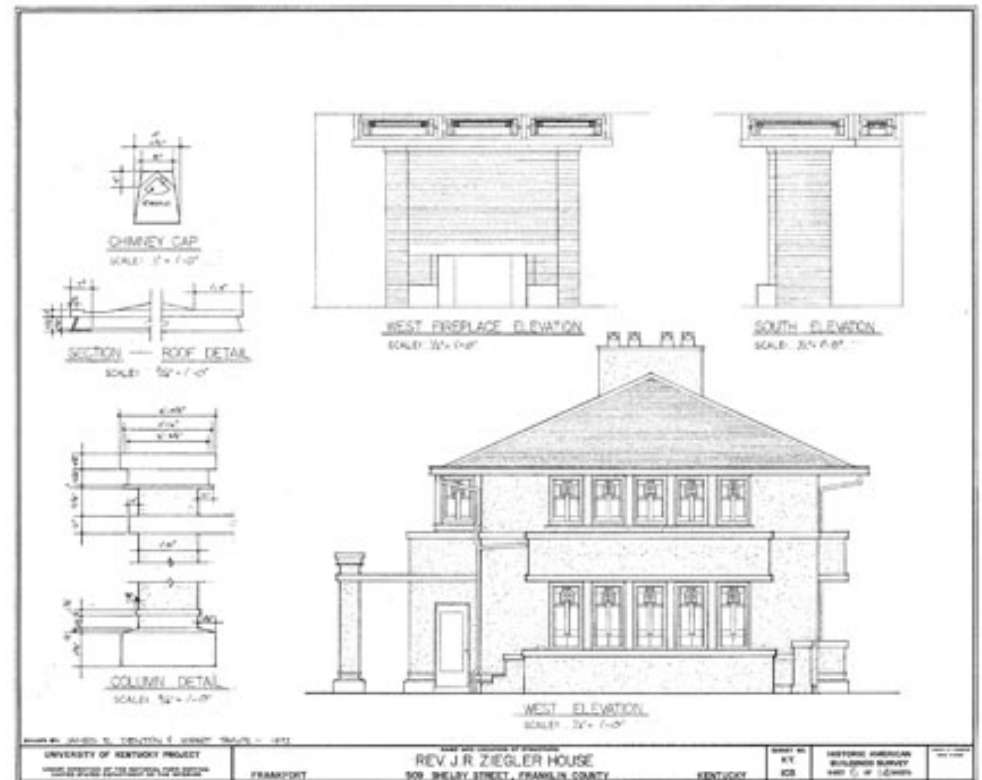
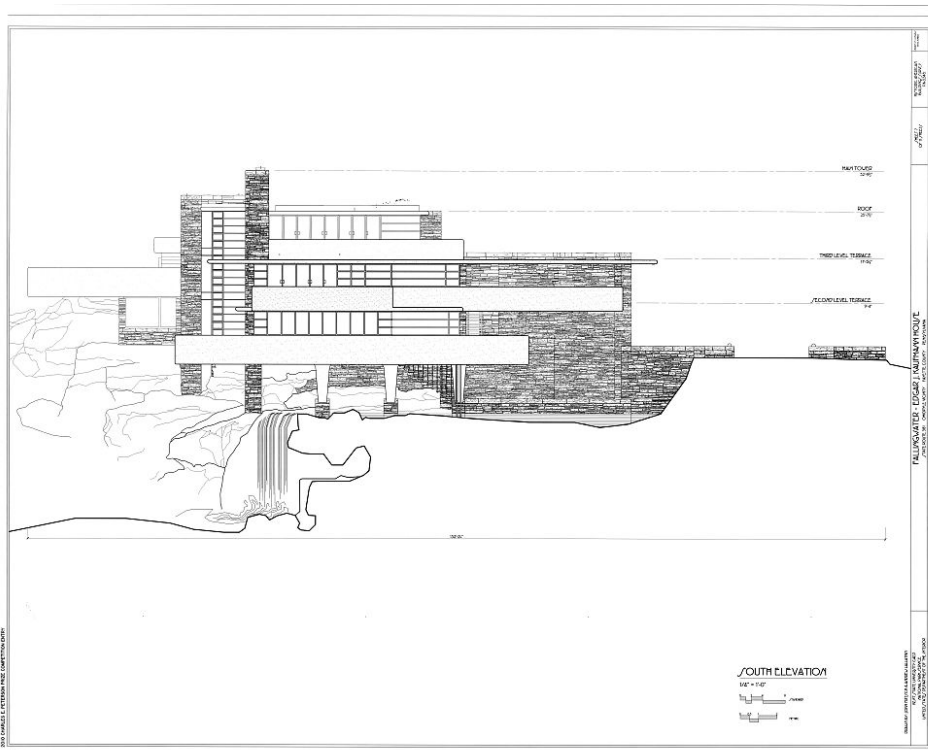
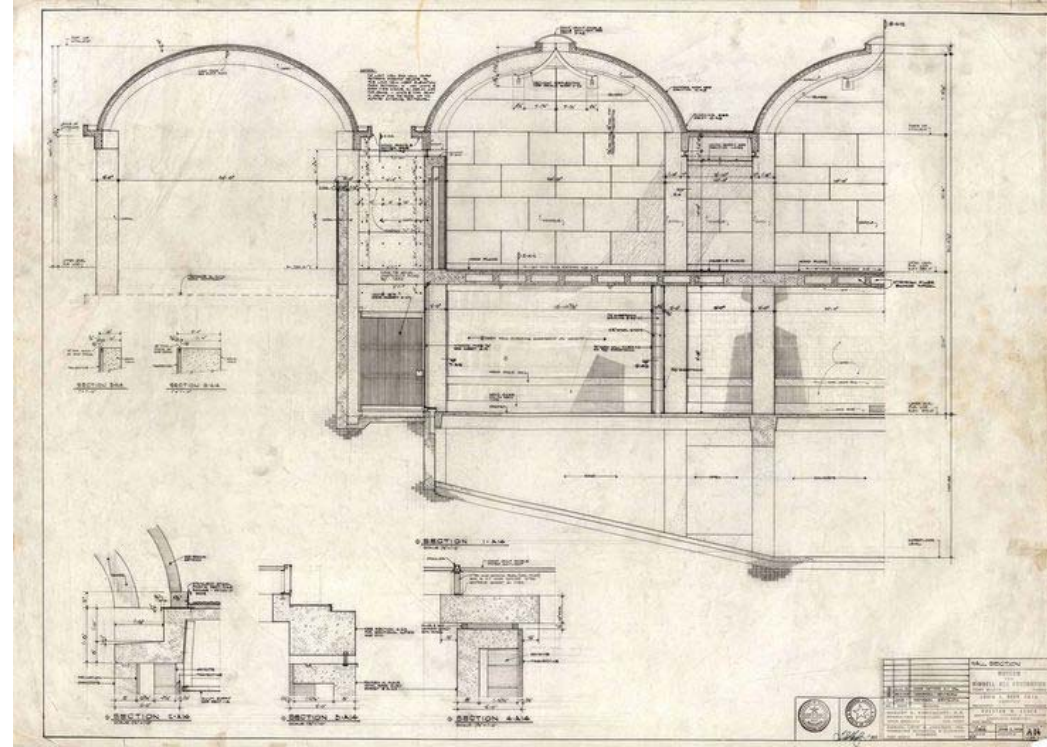
Standard conventions are essential for clear, unambiguous written, oral, and graphical communication. Drawings are used by a variety of trades to communicate their ideas: engineers, architects, contractors, vendors, fabricators...

**Standards ensure that a drawing conveys the same meaning to all who read them.**

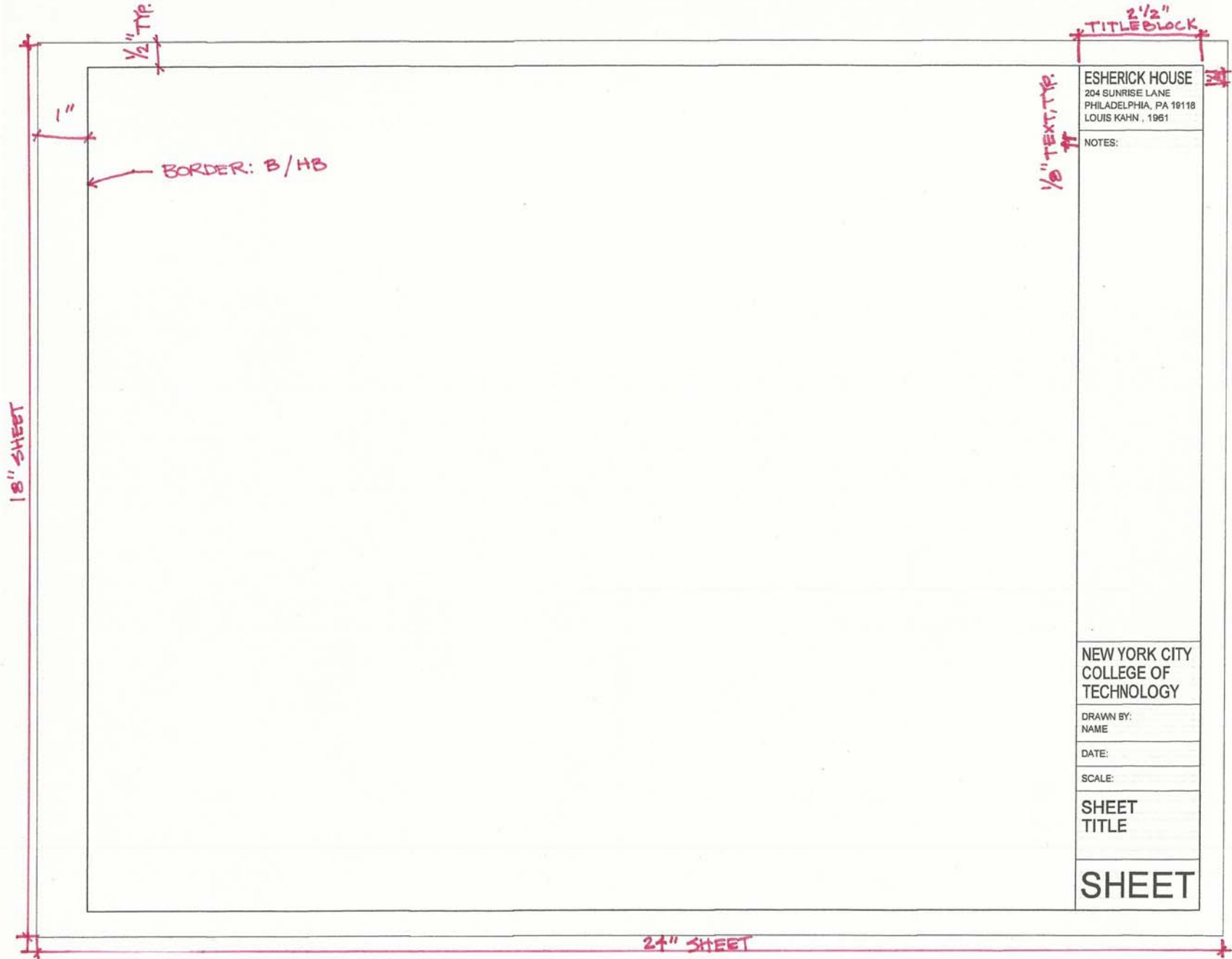
	<b>ESHERICK HOUSE</b> 204 SUNRISE LANE PHILADELPHIA, PA 19118 LOUIS KAHN, 1961
	NOTES:
<b>NEW YORK CITY COLLEGE OF TECHNOLOGY</b>	
DRAWN BY: YOUR NAME	
DATE:	
SCALE: AS NOTED	
<b>CELLAR PLAN &amp; DETAIL</b>	
<b>A-100</b>	

**TITLEBLOCK and SHEET FORMAT**

# DRAWING STANDARDS: TITLEBLOCK and SHEET FORMAT



# SHEET FORMAT



# TITLEBLOCK

PROJECT INFORMATION

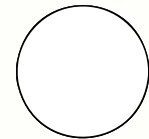
ESHERICK HOUSE  
204 SUNRISE LANE  
PHILADELPHIA, PA 19118  
LOUIS KAHN, 1961

1 1/4"

NOTES:

NOTES, REVISION TRACKING, KEY

PROFESSIONAL SEAL



COMPANY INFORMATION

NEW YORK CITY  
COLLEGE OF  
TECHNOLOGY

AUTHOR - RESPONSIBLE FOR DRAFTING

DRAWN BY:  
NAME

DATE:

SCALE:

DRAWING NAME OR TYPE  
(PLAN/ELEVATION/SECTION/DETAIL)

SHEET  
TITLE

DRAWING NUMBER

SHEET

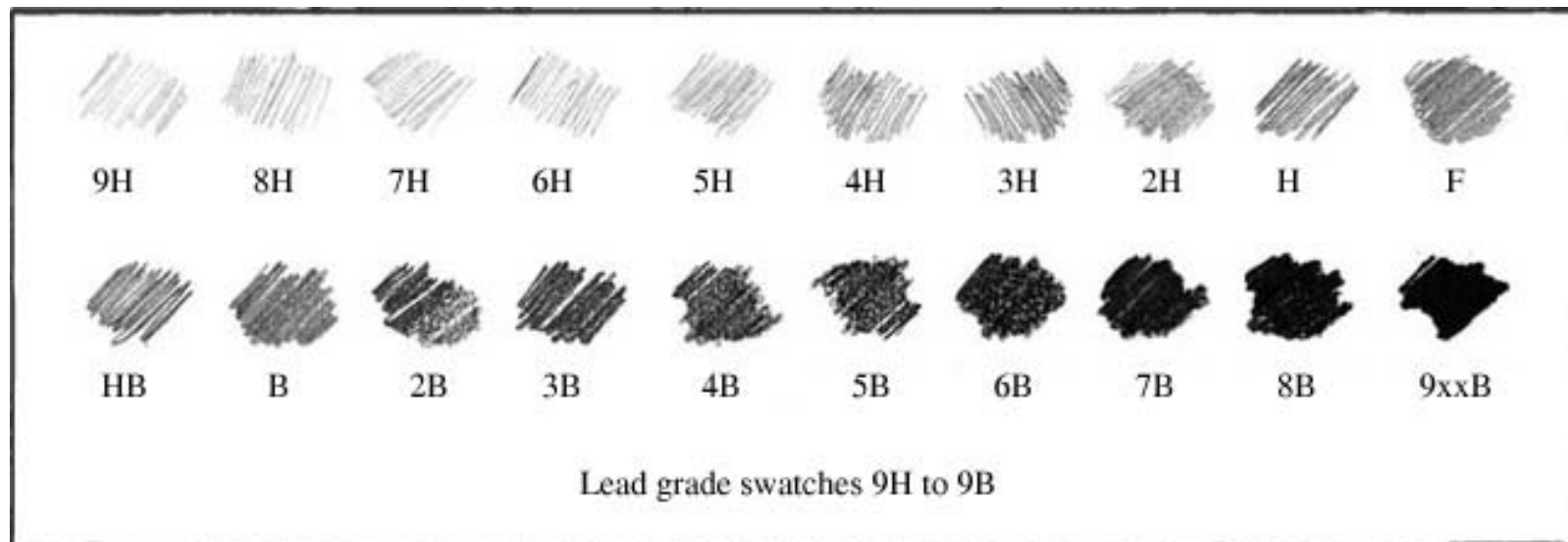
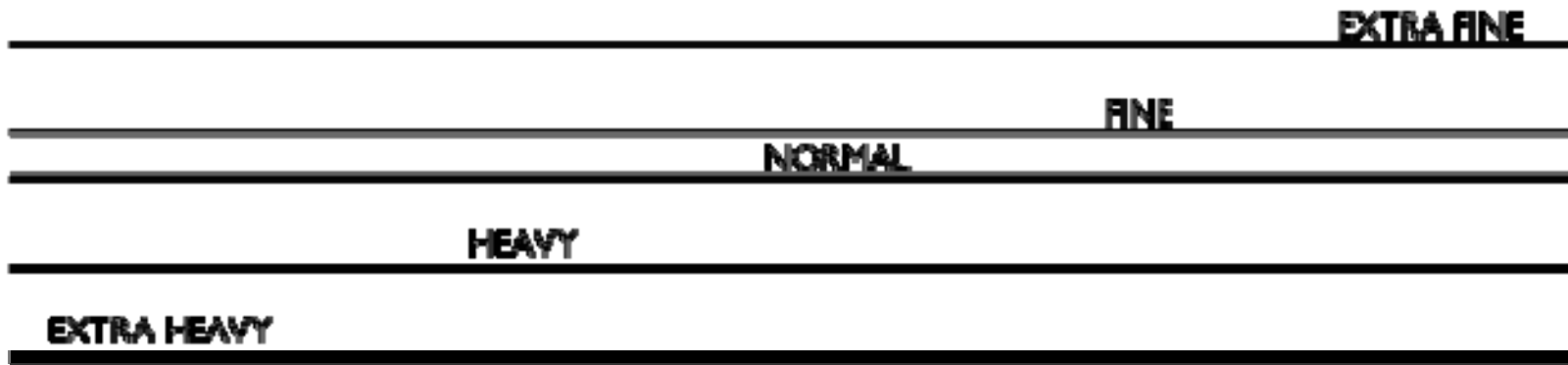
1/8" EXT. TYP.  
1/4" EXT. TYP.  
1/4" HEADINGS TYP.  
1/8" SPACING TYP.  
1/8" EXT. TYP.

1 1/4"  
3/4"  
1/2"  
1/2"  
1 3/8"  
1"



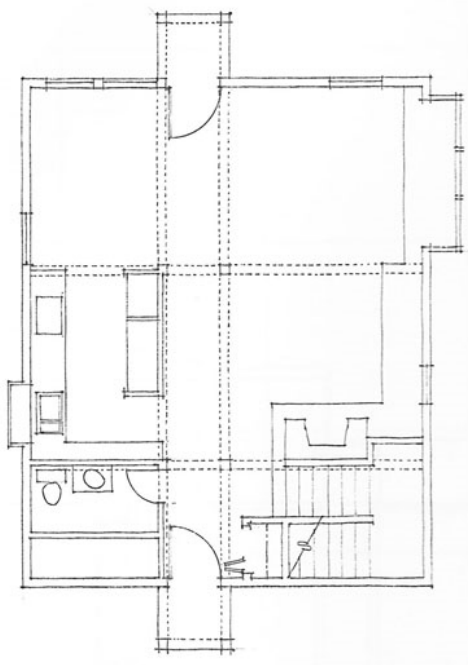
# DRAWING STANDARDS: LINEWORK

## LINEWEIGHT

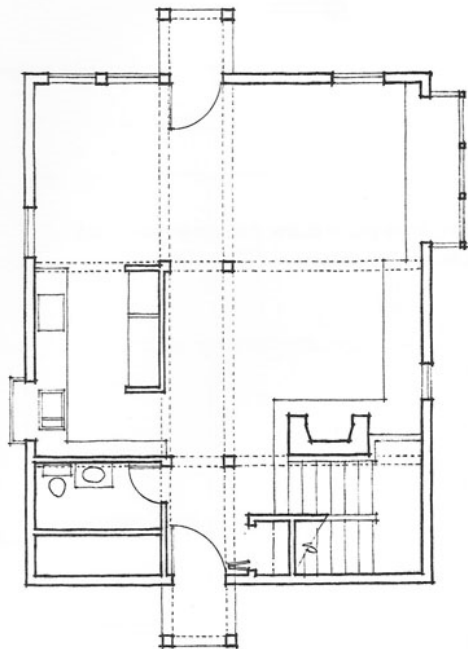


# LINEWORK

## LINEWEIGHT



Single lineweight



Correct lineweights

In theory, all lines should be uniformly dense for ease of readability and reproduction. Line weight is therefore primarily a matter of width or thickness. While inked lines are uniformly black and vary only in width, pencil lines can vary in both width and tonal value, depending on the hardness of the lead used, the tooth and density of the surface, and the speed and pressure with which you draw. Strive to make all pencil lines uniformly dense and vary their width to achieve differing line weights.

### Heavy

- Heavy solid lines are used to delineate the profiles of plan and section cuts (see pages 54 and 71) as well as spatial edges (see page 99).
- Use H, F, HB, or B leads; pressing too hard to draw a bold line indicates that you are using too hard of a lead.
- Use a lead holder or draw a series of closely spaced lines with a 0.3 mm or 0.5 mm mechanical pencil; avoid using a 0.7 mm or 0.9 mm pencil for drawing heavy line weights.

### Medium

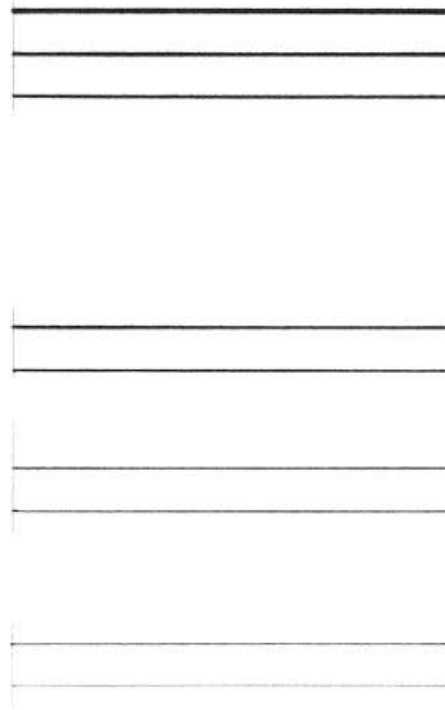
- Medium-weight solid lines indicate the edges and intersections of planes.
- Use H, F, or HB leads.

### Light

- Lightweight solid lines suggest a change in material, color, or texture, without a change in the form of an object.
- Use 2H, H, or F leads.

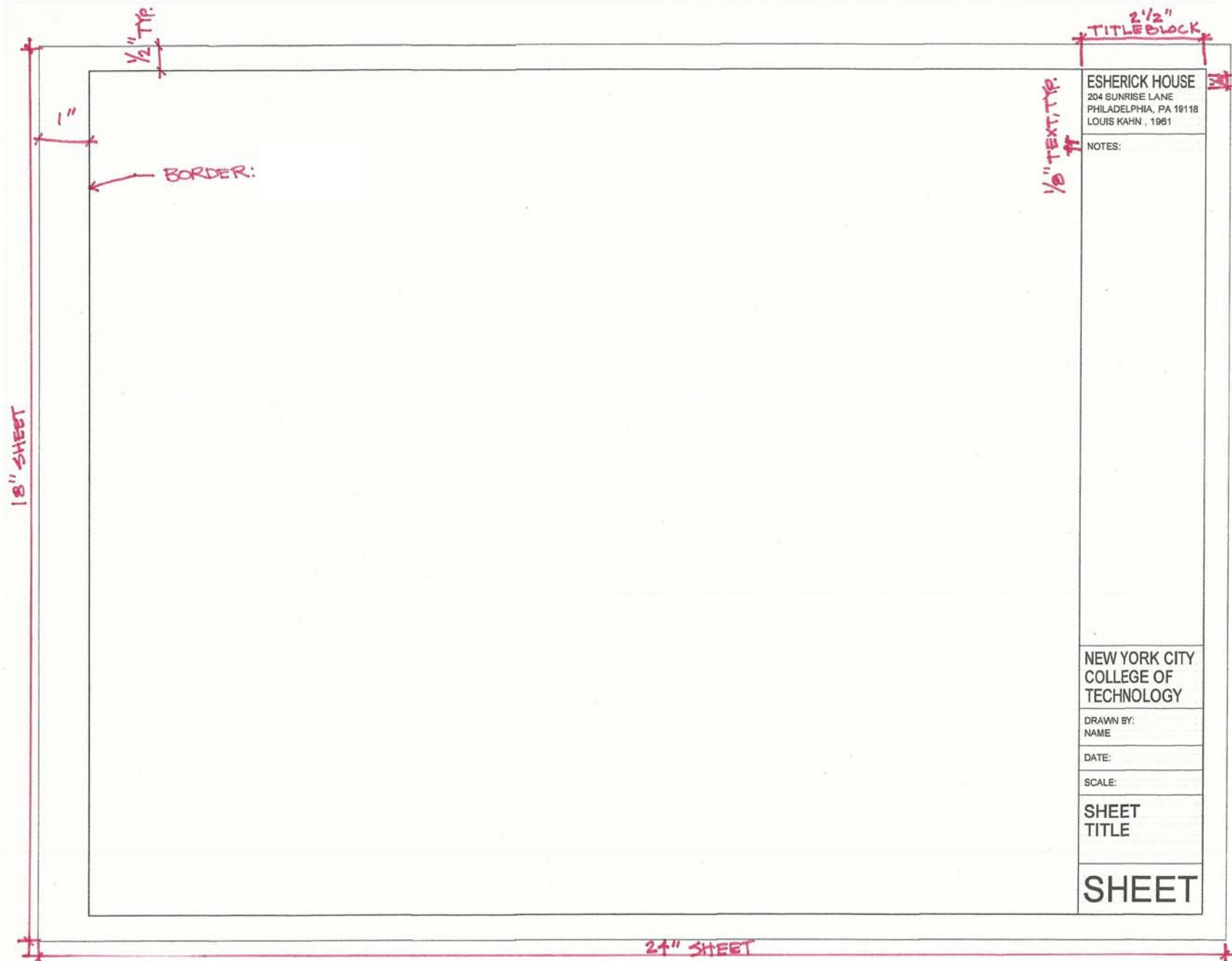
### Very Light

- Very light solid lines are used to lay out drawings, establish organizing grids, and indicate surface textures.
- Use 4H, 2H, H, or F leads.



# LINEWEIGHT

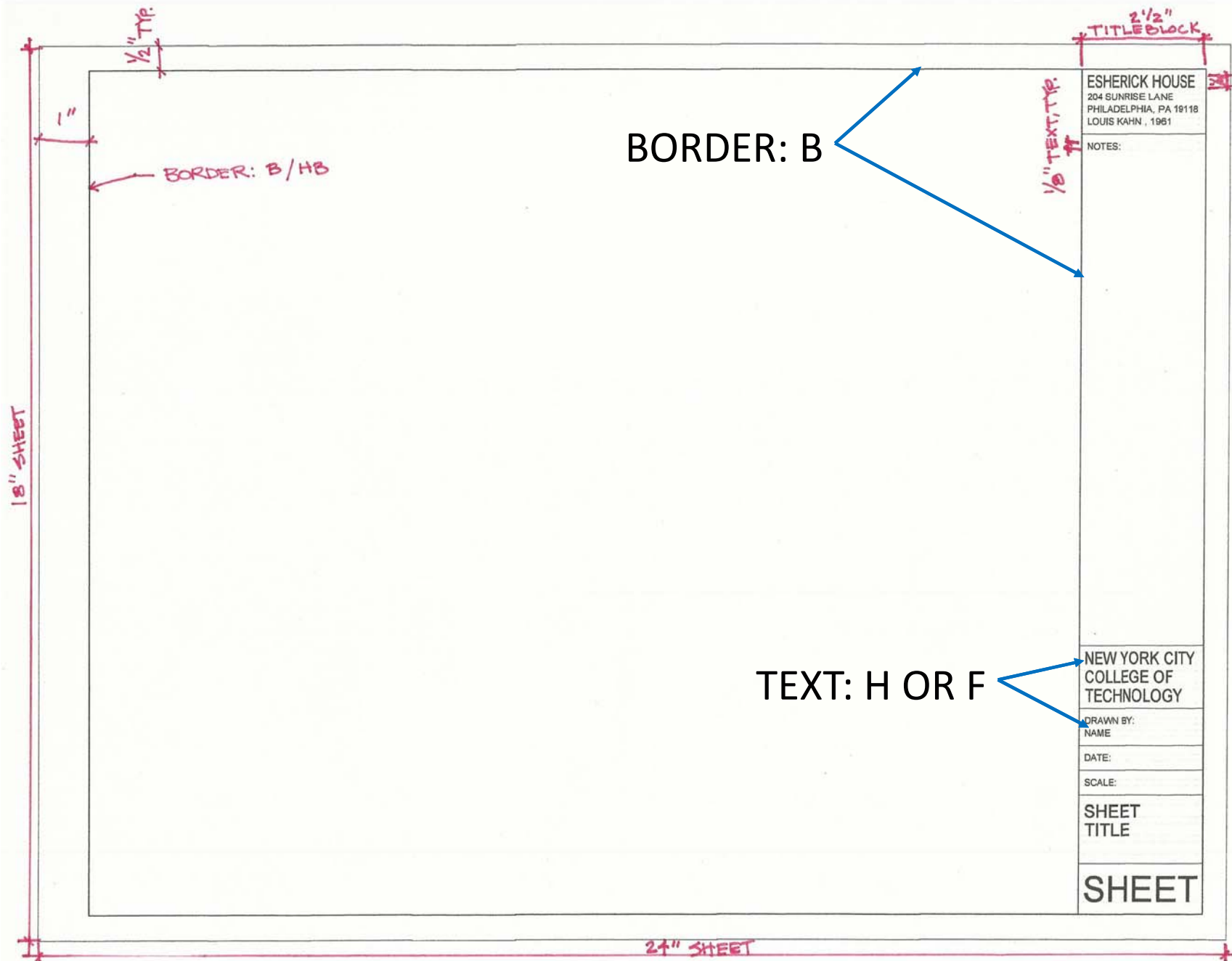
## WHICH WOULD YOU USE?





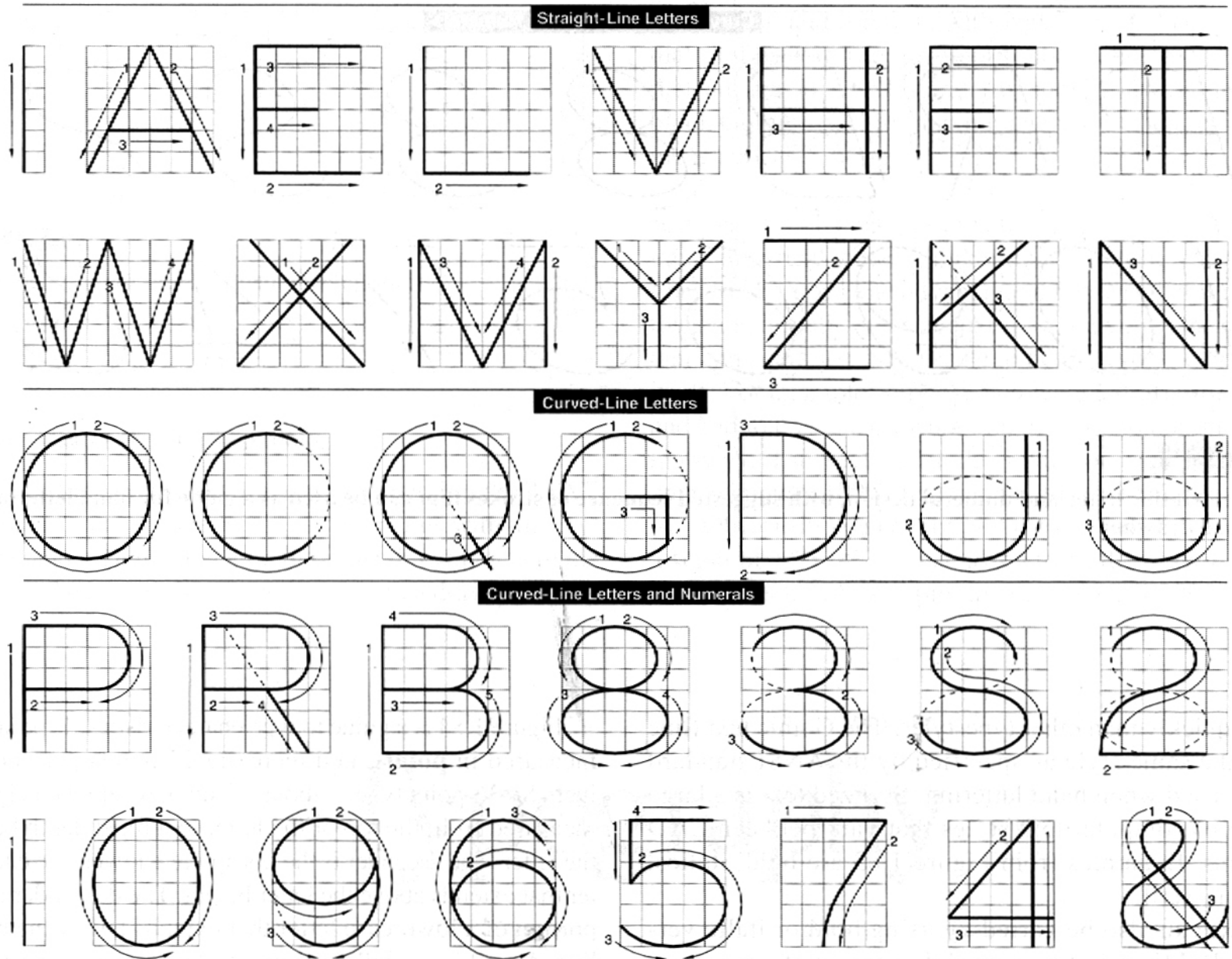
# LINEWEIGHT

## WHICH LEAD WOULD YOU USE?

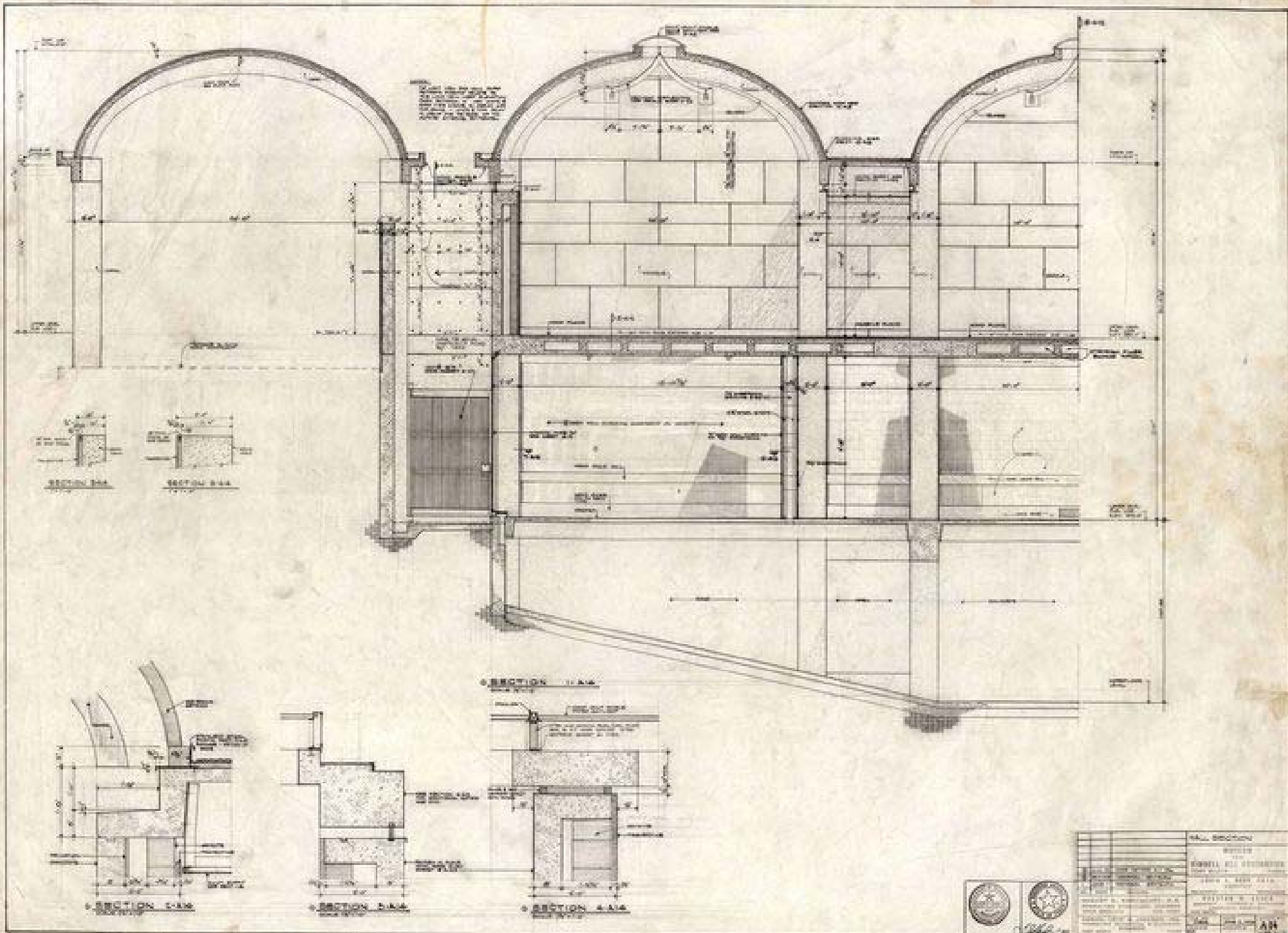


# DRAWING STANDARDS: LETTERING

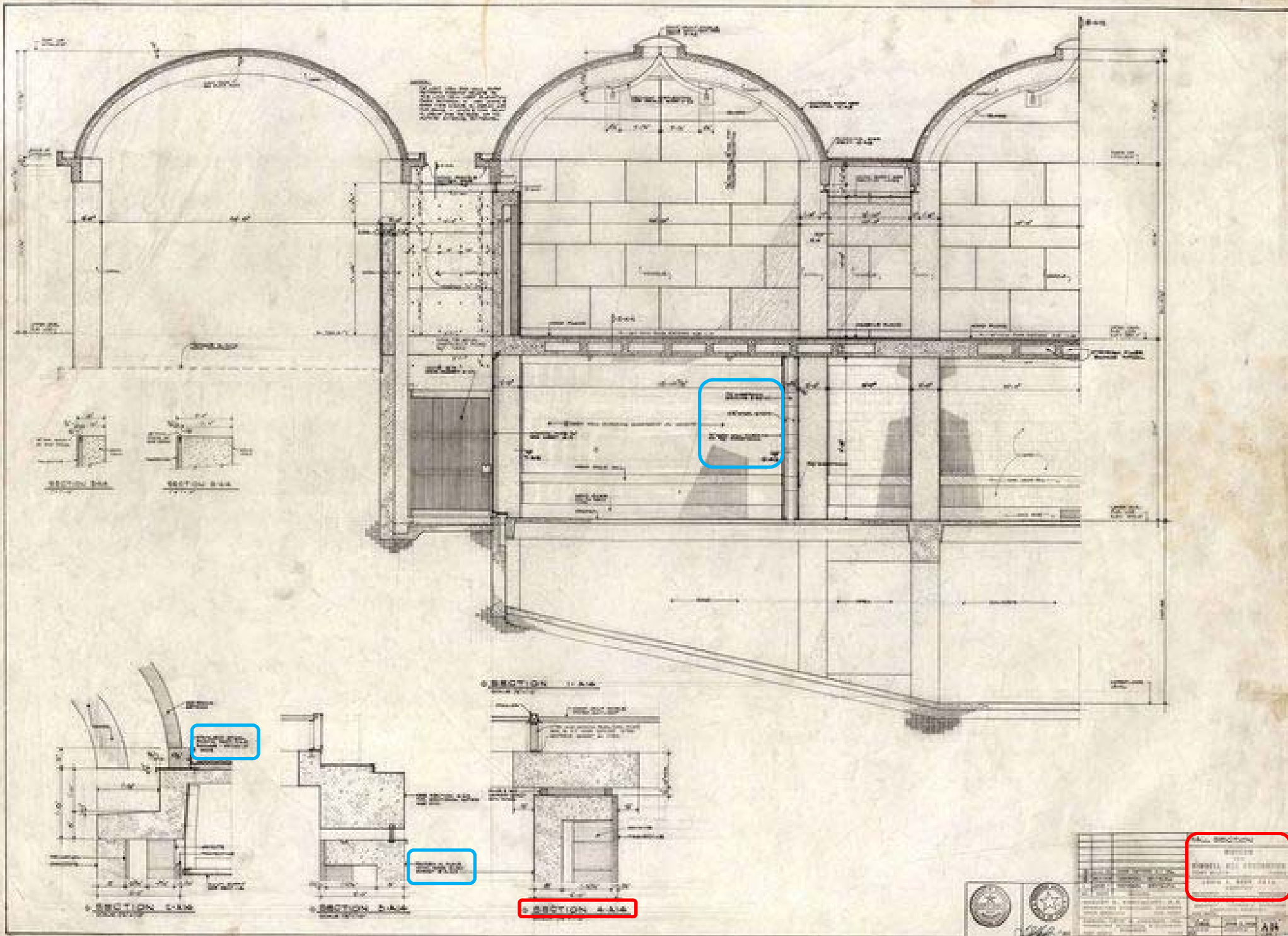
USE ONLY CAPITAL LETTERS, SINGLE STROKE GOTHIC TYPE



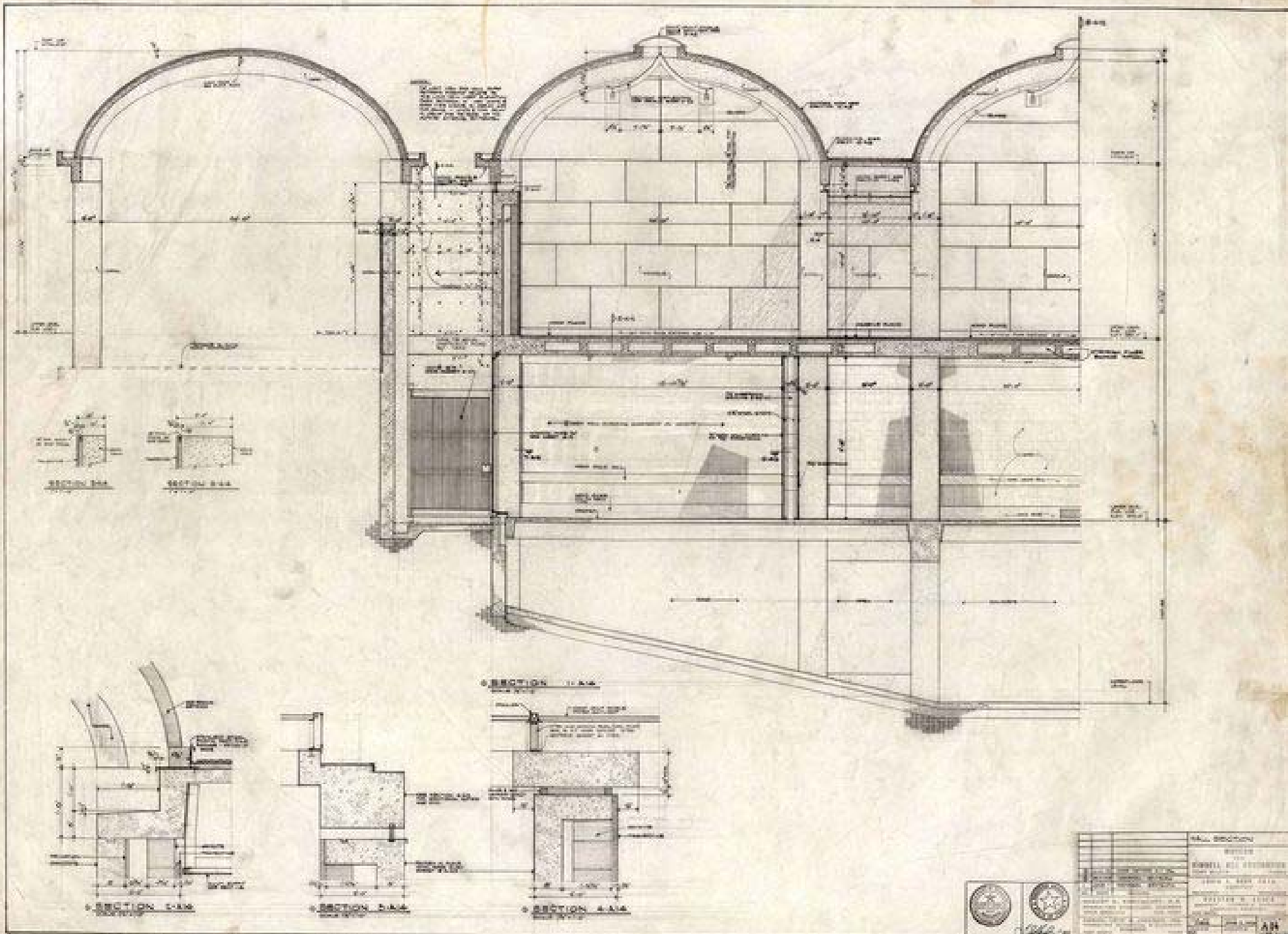
# HOW MANY VARIATIONS OF TEXT HEIGHT DO YOU SEE?



# HOW MANY VARIATIONS OF TEXT HEIGHT DO YOU SEE?

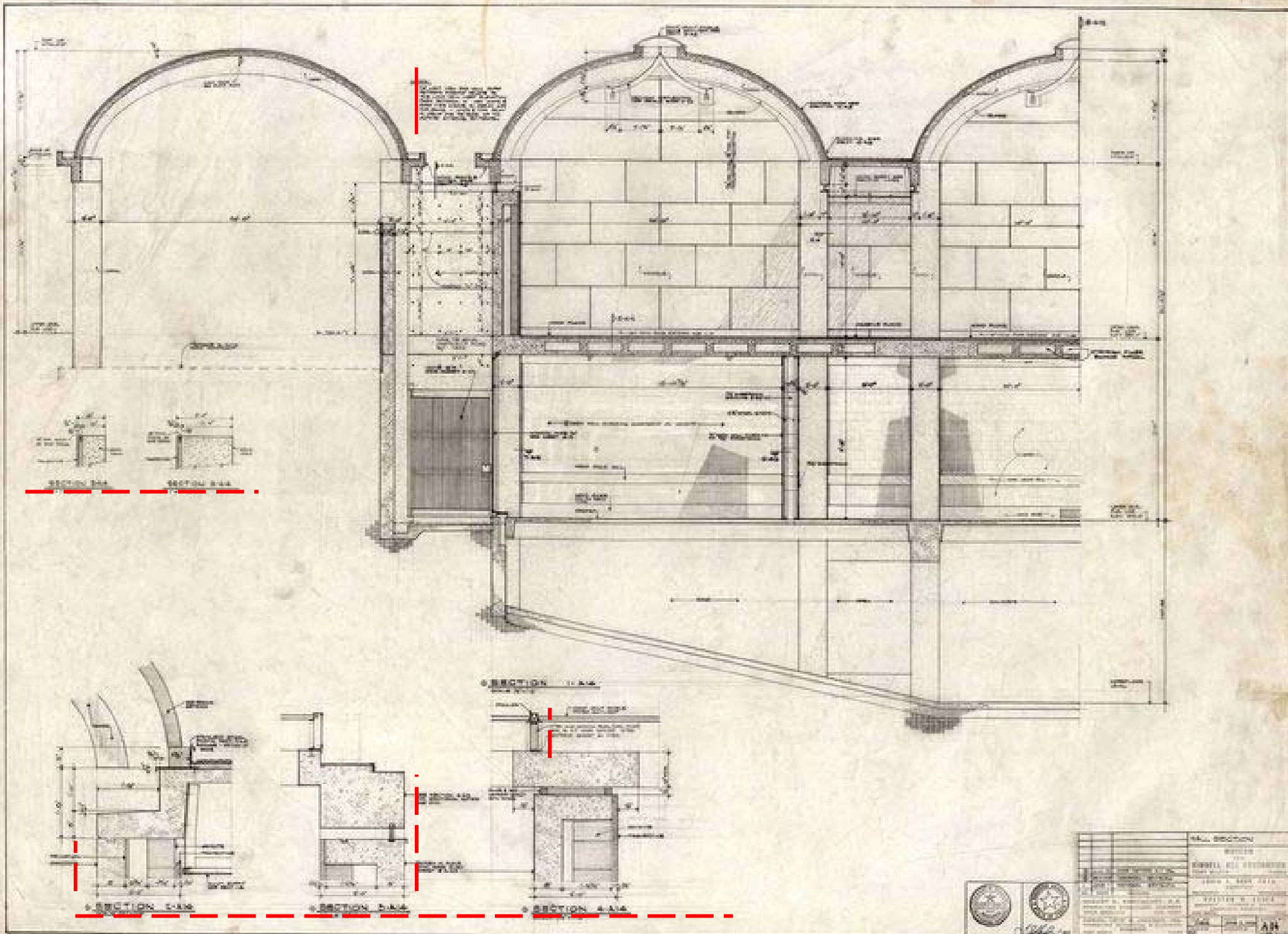


# WHERE IS THE TEXT LOCATED? HOW IS IT POSITIONED?





# WHERE IS THE TEXT LOCATED? HOW IS IT POSITIONED?



# LETTERING ERRORS TO AVOID:

ESTIMATE

**GOOD EXAMPLE!**

ESTIMaTE

Letters not uniform in style.

ESTIMATE  
ESTIMATE

Letters not uniform in height.

ESTIMATE  
ESTIMATE

Letters not uniformly vertical or inclined.

ESTIMATE  
ESTIMATE

Letters not uniform in thickness of stroke.

ESTIMATE

Areas between letters not uniform.

# ASSIGNMENT: A001 COVER SHEET

<h2>ESHERICK HOUSE</h2>	<p>ESHERICK HOUSE 204 SUNRISE LANE PHILADELPHIA, PA 19118 LOUIS KAHN, 1961</p>																										
	<p>NOTES: * TEXT HEIGHT: • HEADINGS = 1/4" • BODY = 1/8" * CALCULATE TEXT SPACING ACCORDINGLY. * BE MINDFUL OF TEXT ALIGNMENTS.</p>																										
<p>204 SUNRISE LANE PHILADELPHIA, PA 19118 ARCHITECT: LOUIS KAHN, 1961</p>	<p><b>GENERAL NOTES:</b></p> <p>1. THE WORK SHALL CONFORM TO MINIMUM STANDARDS OF THE BUILDING CODES OF THE CITY OF NEW YORK, AS WELL AS OTHER REGULATING AGENCIES HAVING LEGAL JURISDICTION.</p> <p>2. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL OBTAIN AND PAY FOR DEPARTMENT OF BUILDINGS WORK PERMIT(S) AND ALL OTHER FEES AND PERMITS NECESSARY FOR THE COMPLETION OF THE WORK.</p> <p>3. ELECTRICAL WORK SHALL BE FILED SEPARATELY, WITH FEES AND REQUIRED INSPECTIONS PAID FOR BY THE ELECTRICAL CONTRACTOR.</p> <p>4. PLUMBING WORK SHALL BE PERFORMED UNDER DIRECT, CONTINUING SUPERVISION OF A LICENSED MASTER PLUMBER. THE PLUMBING CONTRACTOR SHALL PAY FOR PLUMBING PERMITS AND CERTIFICATIONS REQUIRED BY THE BUILDING CODE.</p> <p>5. THE CONTRACTOR SHALL OBTAIN ADEQUATE KNOWLEDGE OF EXISTING CONDITIONS AT THE SITE BY DILIGENT EXAMINATION OF THE PREMISES. BY ACCEPTING THE TERMS OF THE CONTRACT THE CONTRACTOR ACCEPTS ALL SUCH CONDITIONS AND ASSUMES FULL RESPONSIBILITY AND COSTS RESULTING THEREFROM.</p> <p>6. THE CONTRACTOR SHALL COORDINATE ALL THE WORK OF THE VARIOUS TRADES, WHETHER INCLUDED IN THIS CONTRACT OR NOT, AS SHOWN ON THE CONTRACT WORK OR OTHER TRADES AND SCHEDULES. THE CONTRACTOR SHALL SCHEDULE THE VARIOUS TRADES TO ENSURE EFFICIENT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK.</p> <p>7. REMOVAL OF DEBRIS SHALL BE MADE AS OFTEN AS NECESSARY TO MAINTAIN PREMISES IN A SAFE, CLEAN AND ACCESSIBLE CONDITION. CLEAN SERVICE ELEVATOR AND STAIRWAY DAILY.</p> <p>8. THE CONTRACTOR SHALL INDEMNIFY THE OWNER AND HIS AGENTS FOR AND AGAINST ALL SUITS, CLAIMS AND LIABILITY ON ACCOUNT OF PERSONAL INJURY OR PROPERTY DAMAGES ARISING FROM THE NEGLIGENCE OF THE CONTRACTOR IN PERFORMANCE OF THE WORK OF THIS CONTRACT.</p> <p>9. WORK OF THIS CONTRACT IS HEREBY WARRANTED BY THE CONTRACTOR FOR A PERIOD OF (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. MANUFACTURER'S DISCLAIMERS AND LIMITATIONS ON PRODUCT WARRANTIES DO NOT RELIEVE CONTRACTOR OF OBLIGATIONS UNDER THIS REQUIREMENT. BY ACCEPTING THE TERMS OF THE CONTRACT THE CONTRACTOR AGREES TO MAKE GOOD ANY AND ALL WORK FOUND TO BE DEFECTIVE IN QUALITY OF MATERIALS OR WORKMANSHIP FOR ANY CAUSE OTHER THAN ORDINARY WEAR AND TEAR.</p>																										
<p><b>LIST OF DRAWINGS:</b></p> <table border="1"> <tr><td>A-000</td><td>TITLE SHEET: LIST OF DRAWINGS AND GENERAL NOTES</td></tr> <tr><td>A-001</td><td>SYMBOLS, MATERIALS &amp; ABBREVIATIONS</td></tr> <tr><td>A-002</td><td>GEOMETRIC CONSTRUCTIONS AND WINDOW SCHEDULE</td></tr> <tr><td>A-003</td><td>ORTHOGRAPHIC VIEWS: INTERIOR ELEVATIONS</td></tr> <tr><td>A-004</td><td>SITE PLAN</td></tr> <tr><td>A-100</td><td>FOUNDATION PLAN AND DETAIL</td></tr> <tr><td>A-101</td><td>FIRST FLOOR PLAN</td></tr> <tr><td>A-102</td><td>SECOND FLOOR PLAN</td></tr> <tr><td>A-201</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A-202</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A-300</td><td>BUILDING SECTIONS</td></tr> <tr><td>A-600</td><td>WALL SECTIONS</td></tr> <tr><td>S-100</td><td>STRUCTURAL FRAMING PLAN</td></tr> </table>	A-000	TITLE SHEET: LIST OF DRAWINGS AND GENERAL NOTES	A-001	SYMBOLS, MATERIALS & ABBREVIATIONS	A-002	GEOMETRIC CONSTRUCTIONS AND WINDOW SCHEDULE	A-003	ORTHOGRAPHIC VIEWS: INTERIOR ELEVATIONS	A-004	SITE PLAN	A-100	FOUNDATION PLAN AND DETAIL	A-101	FIRST FLOOR PLAN	A-102	SECOND FLOOR PLAN	A-201	EXTERIOR ELEVATIONS	A-202	EXTERIOR ELEVATIONS	A-300	BUILDING SECTIONS	A-600	WALL SECTIONS	S-100	STRUCTURAL FRAMING PLAN	<p><b>EXTRA CREDIT!</b></p>
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<p>NEW YORK CITY COLLEGE OF TECHNOLOGY</p>	<p>DRAWN BY: NAME</p>																										
<p>DATE:</p>	<p>SCALE:</p>																										
<p>TITLE SHEET</p>	<p>A-000</p>																										