



Національний університет
водного господарства
та природокористування

Н. М. Кузло

ENGLISH FOR CIVIL ENGINEERING STUDENTS



Рівне – 2017



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Національний університет водного господарства та природокористування

Н. М. Кузло



English for civil engineering students

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Навчальний посібник з англійської мови професійного спрямування містить навчальний матеріал та комплекси вправ для формування англомовної лінгвістичної компетенції майбутніх інженерів-будівельників. Книга буде корисною також всім тим, хто хоче підвищити свою англомовну лінгвістичну компетенцію в будівництві на базі ескізного робочого будівельного проекту.

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Introduction

Навчальний посібник “English for civil engineering students” призначений для студентів напряму підготовки 192 “Будівництво та цивільна інженерія” освітньо-кваліфікаційного рівня “бакалавр” та “магістр”.

Концепція навчального посібника ґрунтується на комунікативній методиці і сприяє розвитку англomовної лінгвістичної компетенції, посилюючи внутрішню мотивацію студентів до вивчення англійської мови професійного спрямування. Навчальне видання побудовано у відповідності з кредитно-модульною системою організації навчального процесу, що запроваджується в Україні. За своїм змістом, структурою, методичним спрямуванням, обсягом мовного матеріалу, наочністю, наявністю розділів контролю за рівнем сформованості англomовної лінгвістичної компетенції навчальний посібник відповідає вимогам підготовки майбутніх фахівців, які повинні володіти рівнем B2 згідно із Загальноєвропейськими рекомендаціями з мовної освіти.

Навчальний посібник “English for civil engineering students” побудований з урахуванням сучасних концепцій методики викладання іноземних мов: інтерактивної комунікативної особистісно-орієнтованої іншомовної освіти, індивідуалізації та професіоналізації навчання іноземної мови в умовах немовного вищого навчального закладу. У розробленому навчальному виданні дотримано такі принципи побудови навчального посібника як принцип науковості, принцип циклічної побудови посібника та принцип опори посібника на комунікативно-когнітивний підхід.

Формування англomовної лінгвістичної компетенції майбутнього інженера-будівельника на основі даного навчального посібника здійснюється за допомогою таких принципів комунікативно-когнітивного підходу: єдності навчання, виховання і розвитку, функціональності у кореляції із принципом інформаційного переходу, системності, інтеграції мовленнєвих видів діяльності із домінантним читанням, когнітивної прогалини, автентичності в рамках комунікативно-орієнтованого навчання англійської мови професійного спрямування.

Англomовна лінгвістична компетенція визначається як сукупність мовних знань у кореляції із предметними та паралінгвістичними знаннями, лексичних та граматичних навичок у



кореляції із паралінгвістичними навичками та інтеграцією у паралінгвістичні вміння, уміння повного та глибинного розуміння ескізного робочого будівельного проекту, що дозволяє інженеру-будівельнику успішно виконувати проектно-конструкторську діяльність в англomовному професійному середовищі та в умовах співпраці із англomовними партнерами.

Основним матеріалом для розробленої методики являється автентичний ескізний робочий будівельний проект “Two family residence” американської будівельної фірми “Brown and Caldwell” як вербально-візуальний комплекс та додатковий – окремі креслення і примітки із будівельних проектів таких закордонних фірм як “Kiku Obata”, “Thomas Miller and Partners”, “АВНТ”, “СН2МHILL”. Автентичний ескізний робочий будівельний проект “Two family residence” складається із загальної характеристики, що містить загальні примітки і таблиці із преціозною та вербальною інформацією до його змісту, креслення-розпланування і плану поверху з примітками, фасаду без приміток. Навчальний посібник включає чотири розділи “General characteristics of the construction project”, “Plot plan”, “Floor plan”, “Elevation”, тематично присвячених компонентному складу робочого будівельного проекту та п'ятий “Consolidation” на закріплення засвоєного мовного матеріалу на рівні цілого ескізного робочого будівельного проекту.

Розділи посібника упорядковані згідно циклічно-концентричної моделі та містять низку методично обґрунтованих етапів формування англomовної лінгвістичної компетенції студентів будівельних спеціальностей чотирьох визначених нами розділів в межах ескізного робочого будівельного проекту “Загальна характеристика будівельного проекту”, “Креслення-розпланування”, “План поверху”, “Фасад”: презентаційний, етап формування навички і закріплення мовного матеріалу на рівні цілого ескізного робочого будівельного проекту” на етапі формування навички із інтеграцією у вміння. Дані етапи відповідно співвідносяться із такими рівнями розуміння професійно-орієнтованих текстів як вербально-візуальних комплексів: рівень розуміння типів лексичних одиниць як вербально-візуального комплексу, змістово-інформаційний, змістово-оцінний та прагматичний з рівнями розуміння ескізного робочого будівельного проекту “Two family residence. Засвоєння змісту розділів “General characteristics of the construction project”,



“Plot plan”, “Floor plan”, “Elevation” відбувається на презентаційному етапі формування навички за рівнем розуміння типів лексичних одиниць вербально-візуального комплексу та змістово-інформаційним рівнем розуміння професійно-орієнтованих текстів з метою формування англомовної лінгвістичної компетенції в рамках комунікативно-когнітивного підходу. Опрацювання змісту розділу “Consolidation” відбувається на етапі формування навички із інтеграцією у вміння за змістово-інформаційним, змістово-оцінним і прагматичним рівнями розуміння змісту цілого ескізного робочого будівельного проекту.

До кожного розділу навчального посібника пропонуються комплекси вправ, які об’єднують окремі групи і підгрупи вправ, що входять до підсистем вправ з формування англомовної лінгвістичної компетенції, тести альтернативного вибору для проміжного контролю та рефлексивно-аналітичні завдання для самоконтролю і самоперевірки навчальних досягнень студентів.

Підсистема вправ з формування англомовної лінгвістичної компетенції включає чотири комплекси вправ: на актуалізацію лексико-граматичних знань; на формування та удосконалення лексико-граматичних навичок на рівні словоформи; на формування та удосконалення лексико-граматичних навичок на рівні речення; на формування та удосконалення лексико-граматичних навичок на рівні понадфразової єдності (компонентів вербально-візуального комплексу); на удосконалення лексико-граматичних навичок на рівні ескізного робочого будівельного проекту.

На презентаційному етапі й етапі формування навички відповідно до рівнів розуміння типів лексичних одиниць вербально-візуального комплексу та змістово-інформаційного рівня розуміння професійно-орієнтованих текстів як вербально-візуальних комплексів до навчальних тем: “Загальна характеристика”, “Креслення-розпланування”, “План поверху”, “Фасад” пропонуються вправи на актуалізацію лексико-граматичних знань; на формування та удосконалення лексико-граматичних навичок на рівні словоформи та речення; на формування та удосконалення лексико-граматичних навичок на рівні понадфразової єдності (компонентів вербально-візуального комплексу).

На етапі формування навички із інтеграцією у вміння відповідно до змістово-інформаційного, змістово-оцінного та



прагматичного рівнів розуміння ескізного робочого будівельного проекту представлено комплекс вправ на формування та удосконалення лексико-граматичних навичок на рівні цілого ескізного робочого будівельного проекту із інтеграцією в уміння повного та глибинного розуміння компонентів вербально-візуального комплексу.

Зміст розділів на даних етапах опрацьовується за допомогою наскрізних завдань. Крім того, кожна тема розділу доповнюється додатковими типами і видами вправ, що створює умови інтенсифікації процесу навчання.

Розділ “Consolidation” представлений комплексом вправ на варіативно-ситуативному етапі формування навички англомовної лінгвістичної компетенції із інтеграцією у вміння повного та глибинного розуміння ескізного робочого будівельного проекту.

Після завершення кожної теми розділу з метою перевірки рівня розуміння теми та сформованості англомовної лінгвістичної компетенції студентам надаються тести альтернативного вибору. Студентам пропонуються рефлексивно-аналітичні завдання, які їм необхідно виконувати із залученням метакогнітивних стратегій ідентифікації і найменування проблеми, оцінки і самооцінки.

Додаток містить матеріали, які становлять пізнавальний та професійний інтерес для студентів. Він нараховує 9 позицій:

1. Приклад автентичного ескізного робочого будівельного проекту “Two family residence” американської будівельної фірми “Brown and Caldwell”
2. Типові символи ескізного робочого будівельного проекту.
3. Приклади типових креслень ескізних робочих будівельних проектів
4. Список сайтів для ескізного робочого будівельного проекту.
5. Підготовка презентацій.
5. Англо-український словник.
6. Глосарій найбільш вживаних термінів ескізного робочого будівельного проекту.
7. Список використаної літератури.
8. Ключі до вправ.
9. Тексти для транзитних нотаток.

Бажаємо успіхів усім користувачам навчального посібника у вивченні англійської мови за професійним спрямуванням!!!



UNIT 1. GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT

Part I GENERAL NOTES

Lead in. Answer the following questions at home. Be ready to discuss them in group.

What is the construction project? Which synonyms for it do you know? What are its main components? What can be seen on it?

Task 1.

You want to become a trainee in an international construction company. You have to check up your language proficiency. Match the following words (1-13) to their translations (a-c). Work alone.

General notes

1. Contractor	a. підрядник b. контракт c. підрядна організація
2. Shop drawing	a. робоче креслення b. наявне креслення c. креслення магазину
3. Permit	a. креслення b. дозвіл c. контракт
4. Project completion	a. завершення проекту b. початок проект c. виконання проекту
5. Product option	a. знак товару b. вигляд товару c. вибір товару
6. Substitution	a. заміщення, заміна b. переміщення c. перестановка
7. Patching	a. зміна b. дрібний ремонт c. обробка



8. Cutting	a. фрезерування b. ремонт c. сантехнічна робота
9. Condition	a. умова b. зміна c. дослідження
10. Insurance	a. робота b. обов'язок c. страхування
11. Substantial completion	a. остаточне завершення b. першочергове дослідження c. остаточний захист
12. Warranty	a. перестановка b. креслення c. гарантія
13. Structural steel	a. конструкційна сталь b. залізобетон c. армоване скло

Task 2.

You want to become a trainee in an international construction company. Your understanding of general notes has to be checked. Skim the text. Define its general subject and the subject of each paragraph. Work alone. Use the following phrases:

The text is about...

The subject of the text is....

There are paragraphs in it.

The first paragraph (second, third) deals with.....

Task 3.

Read the text:

GENERAL NOTES. The architects administration of the construction work by mutual consent is not the part of this agreement. The owner or general contractor shall appoint a person to be in charge of the work per construction control execution.

PERMITS. The contractor shall be responsible for obtaining and paying for all the required permits, inspections.



PROJECT COMPLETION. Upon completion of the project, the contractor must submit a certificate of occupancy approved by the building apartment to the owner.

PRODUCT OPTIONS. It is the contractor's responsibility to select products which comply with the contract documents which are compatible with one another, with existing work. The products selected by other contractors provide manufacturer's information.

SUBSTITUTIONS. Submission of a substitution request by the contractor where permitted on the contract documents shall constitute a representation by the contractor that he/she has investigated the proposed product or conditions and determined that it is equal to or better than the specified product or condition including warranty coverage.

The following shall be furnished and coordinated by the contractor or owner shall not be part of the scope of work on these construction documents.

- demolition of any or all existing structures, pavement or trees.
- site engineering including but not limited to site grading, soil investigations, environmental
- investigations, sit drainage, landscaping, driveways, retaining walls, utilities, septic, where applicable and other improvements outside the building.

Notify the architect if the proposed use is not in accordance with local and state requirements. Provide the architect with any necessary documentation including zoning, setbacks, environmental regulations or any similar constraints which may affect the project. However, in no case shall any part of the dwelling be located within property line without approval of the architect

Do not scale drawings. Written dimensions shall govern.

Contractor shall check, verify and maintain all dimensions, grades, levels and other conditions before proceeding with fabrication and construction. Coordinate exact locations of equipment, fixtures and outlets with finished elements where necessary.

SHOP DRAWINGS. Contractor shall furnish shop drawings for all shop fabricated items.



CUTTING AND PATCHING. Include all cutting and patching for penetrations through floors, walls, ceilings and roofs. Do not cut or notch any structural member to reduce its load carrying capacity.

UNFORSEEN CONDITIONS. Should unforeseen conditions be encountered that affect design or function of the project.

Provide temporary facilities, service utilities and protection as required to safely executing all work. Protect adjacent construction and inhabitants.

RECORD DRAWINGS. The contractor shall maintain and prepare a complete set of record construction drawings.

INSURANCE. All contractors and subcontractors shall take out and maintain workman's compensation insurance.

SUBSTANTIAL COMPLETION. Contractor shall procure final certificate of occupancy upon completion of the project.

WARRANTIES. Unless otherwise noted, contractor is to provide written warranty for a period of one year from the date of substantial completion.

STRUCTURAL STEEL shall conform to specifications.

Task 4.

Read the text and decide if the statements below are true (T) or false (F). Work alone.

1. The contractor is responsible for obtaining and paying for all the required permits, inspections and completing the project.
2. The role of the architect is great in the location of dwelling within property line.
3. Drawings have to be scaled.
4. Unforeseen conditions have not be taken into account.
5. Contractor shall not complete the final certificate of occupancy.
6. There are many duties for the contractor.

Task 5.

Find the necessary ending to the following sentence. There is one odd ending. Work alone.

1. It is the contractor's responsibility
2. Provide the architect with any necessary documentation
3. Contractor shall check, verify
4. All contractors and subcontractors shall take out
5. Contractor is to provide written warranty
 - a. including zoning, setbacks, environmental regulations or any similar constraints which may affect the project



- b. to select products which comply with the contract documents which are compatible with one another, with existing work.
- c. for a period of one year from the date of substantial completion.
- d. and maintain all dimensions, grades, levels and other conditions
- e. and maintain workman's compensation insurance.
- f. prepare a complete set of record construction drawings.

Task 6.

Answer the following questions. Work in groups of three-four students.

What are the responsibilities of the contractor?

What is the necessary documentation for the architect?

What should not be done by a civil engineer?







UNIT 1. GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT

Part II TABLES OF GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT

Task 1.

You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the general characteristics of the construction project. Match the words (1-16) to their transcriptions and translations (a-c). Work alone.

Zoning chart

1. Zoning chart 	a. ['ʌzə:niŋ ↓tʃɑ:t] схема зони b. ['ʌzəniŋ ↓tʃɑ:t] таблиця зони c. ['ʌzəniŋ ↓tʃɑ:t] таблиця зональності (районування)
2. Detached residential 	a. [dɪ'tætʃt ↓rezi'den(t)(ə)l] окремо розташована житлова будівля b. [dɪ'tætʃd ↓rizi'den(t)(ə)l] окремо розташована споруда c. [dɒtʃt ↓reze'den(t)(ə)l] окремо розташований житловий комплекс
3. Area	a. ['eəriə] площа b. ['eəriə] сфера c. ['eəri] діяльність
4. Yard	a. [jɑ:d] брус b. [jɑ:d] площадка, подвір'я c. [jɔ:d] ярд
5. Frontage	a. ['frəntɪdʒ] ширина фронту b. ['frəntɪdʒ] межа земельної ділянки c. ['frɑ:ntɪdʒ] передня частина
6. Dwelling unit	a. [ʌ'dwɪlɪŋ ↑ju:nɪt] розділ про житло b. [ʌ'dwelɪŋ ↑ju:nɪt] житлова одиниця c. [ʌ'dwelɪŋ ↑ju:nɪt] житлова частина



7. Bulk	a. [bʌlk] корпус будівлі b. [bælk] основна маса c. [beʌlk] велика частина
8. Nonconforming	a. [ˌnɒnkən'fɔːmɪŋ] невідповідний b. [ˌnɒnkɪ'fɔːmɪŋ] неправильний c. [ˌnɔːnkɪ'fɔːmɪŋ] відповідний

Building characteristics

9. Gross floor area	a. [ˌdʒrəʊsˌflɔːəriə] площа першого поверху b. [ˌdʒrəʊsˌflɔːəriə] загальна площа поверху c. [ˌdʒrəʊsˌflɔːəriə] площа другого поверху
10. Building volume	a. [ˌbɪldɪŋˌvɔːljʊm] місткість будівлі b. [ˌbɪldɪŋˌvɔːljʊm] площа будівлі c. [ˌbɪldɪŋˌvɔːljʊm] висота будівлі

Design load schedule

11. Design load schedule	a. [ˌdɪ'zainˌləʊdˌʃedʒuːl] таблиця створеного навантаження b. [ˌdɪ'zainˌləʊdˌʃedʒuːl] таблиця розрахункового навантаження c. [ˌdɪ'zainˌləʊdˌʃedʒuːl] таблиця проекту
12. Top chord live	a. [ˌtɒpˌkɔːdˌlaɪv] тимчасове навантаження на верхній пояс ферми b. [ˌtɒpˌkɔːdˌlaɪv] постійне навантаження на верхній пояс ферми c. [ˌtɒpˌkɔːdˌlaɪv] верхнє навантаження
13. Bottom chord dead	a. [ˌbɒtəmˌkɔːdˌded] тимчасове навантаження на нижній пояс ферми b. [ˌbɒtəmˌkɔːdˌded] постійне навантаження



	навантаження на нижній пояс ферми с. [↓bɔteəm↓kɔd↑də:d] нижнє навантаження
14. Attic storage	a. [↓ɑ:tɪk↑stɔ:ɪdʒ] склад на горищі b. [↓æɪtɪk↑stɔ:ɪdʒ] ємність (місткість) горища c. [↓ɑ:tɪk↑stɔ:ɪdʒ] збереження горища

Other parts of general characteristics of a construction project

15. Owner information	a. [↓ɑ:nəɪ↑nfə'meɪʃ(ə)n] власна інформація b. [↓əʊnə↑nfə'meɪʃ(ə)n] інформація про власника c. [↓ənə↑nfə'meɪʃ(ə)n] особиста інформація
16. List of drawings	a. [↓lɪst↓ɔv↑drɔ:ɪŋz] перелік креслень b. [↓lɪst↓ɔ↑fdrɔ:ɪŋz] ряд креслень c. [↓lɪst↓ɔv↑drɔ:ɪŋz] вибір креслень

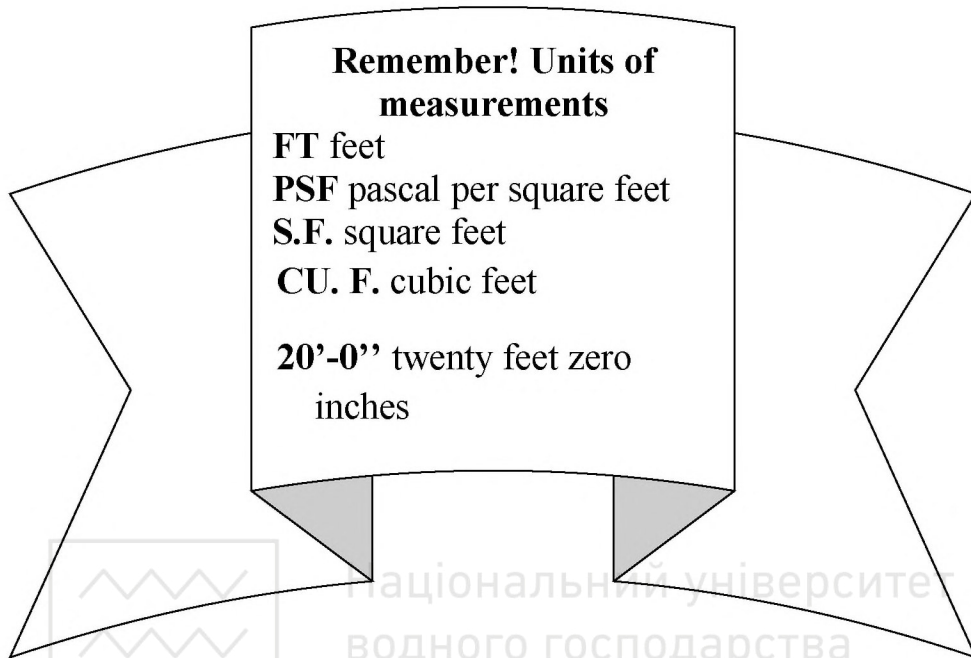
Task 2.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Match the words (1-10) to the words (a-h) to choose the correct word combinations with the decimals for the construction project. There is one odd word. See Supplement 1. Work alone, then in pairs.

1. Lot 3000 S.F.	a. yard
2. Side 3'-0"	b. space
3. Rear 20'-0"	c. width
4. Living space 50 PSF	d. depth
5. Bottom 5 PSF	e. area
6. Parking	f. height
7. Sleeping 40 PSF	g. chord
8. Top 10 PSF	h. area

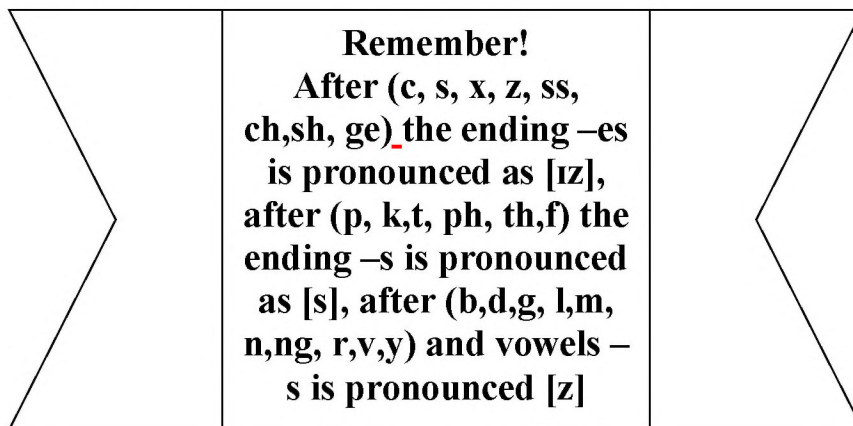


9. Front 20'-0"	i. frontage
10. 36. 720 CU. FT	j. volume



Task 3.

You want to become a trainee in an international construction company. You have to test your language proficiency. Choose the most appropriate rules for the words below from the construction project. Work alone, then in pairs.



Example: after (p, k, t, ph, th, f) is pronounced as [s] – remarks



Zoning chart: remarks , yards, frontages, areas

Design load schedule: spaces, storages

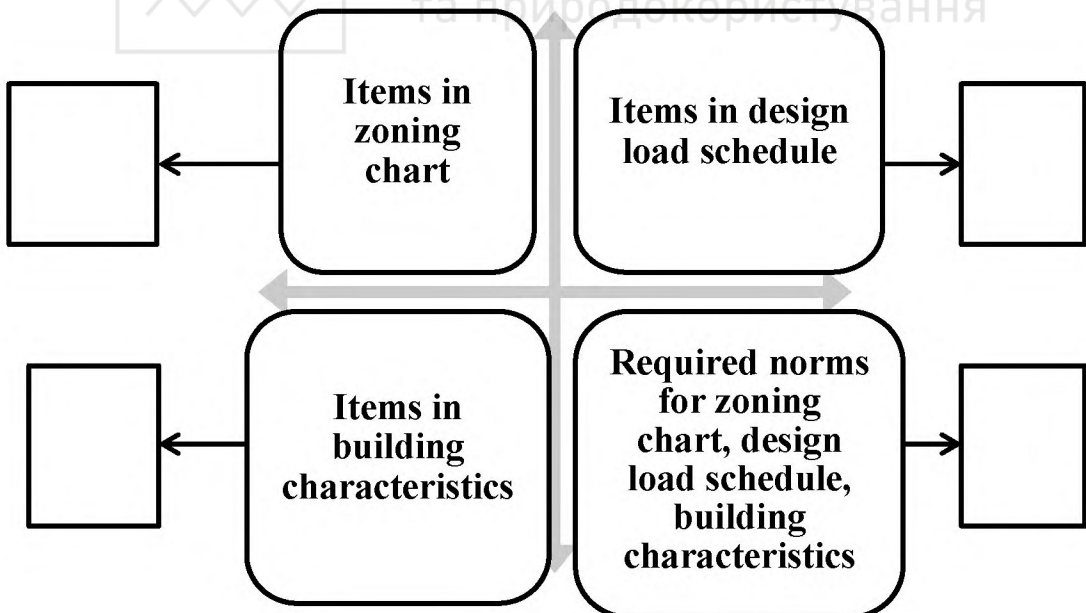
Task 4.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The general characteristics of the construction project”. Circle the odd words out which do not fit this topic. Work alone.

Property line, landscaped area, bifold door, rear yard, front yard, top chord live, bottom chord dead, frontage, wind, living space, sleeping space, lot, zone, frontage, height, lot area, building volume, wall.

Task 5.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The general characteristics of the construction project”. Listen to the decimals and abbreviations for the topic “The general characteristics of the construction project”. Label the following parts of diagram with words they mean. Work alone and take turns to check up in pairs.





Task 6.

You want to become trainees in an international construction company. You have to repeat the words from the tables of the general characteristics with the ending - s. In small groups, find the words in plural and word combinations with noun and adjective, noun and noun from the tables of general characteristics of the construction project of two family residence.

Example for you: remarks – plural, lot area – noun+noun, principal use – noun+adjective

ZONING CHART

Address		10 East 18 th street, Bayonne, New Jersey			
Block		14			
Lot		232			
Zone		R-2			
Principal use		Detached/attached residential, detached double family permitted			
Bulk yard	and lot	Required	Proposed	Variance required	Remarks
Min. area		3000 S.F.	2545 S.F.	No	Existing, non-conforming
Min. frontage		30 FT.	25 FT.	No	Existing, non-conforming
Min. lot width		30 FT.	25 FT.	No	Existing, non-conforming
Min. lot depth		100 FT.	101. 27 FT.	No	
Min. front yard		20'-0'' or prevailing	16'-0''	No	Prevailing setback
Min. rear yard		20'-0''	20'-5''	No	
Min. side yard		3'-0'' (one) 6'-0'' (both)	3'-1''(one) 6'-''(both)	No	



Parking spaces	1-1/2 spaces per dwelling unit	3	No	
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3. BUILDING CHARACTERISTICS

Construction type	5A
Use group	R5
Floor areas	Ground floor 1201 S.F. First floor 1224 S.F. Second floor 1224 S.F.
	Gross floor area 3649 S.F.
Building volume	36.720 CU.FT.

4. DESIGN LOAD SCHEDULE

Roof		Floors	
Top chord live	30 PSF	Living spaces	40 PSF
Top chord dead	10 PSF	Living spaces	10 PSF
Bottom chord dead	5 PSF	Total	50 PSF
Total	45 PSF		
		Sleeping spaces	30 PSF
Attic storage	20 PSF	Sleeping spaces	10 PSF
Wind	90 MPH	Total	40 PSF

Task 7.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. Choose the correct sentence for the each line from the table of the general characteristics of two family residence. Work alone.

ZONING CHART

- Space 10 East 18th street, Bayonne, New Jersey *a. There is a location of the space . b. There is a load on the block.*
- Address 14 *a. There is a location of the block. b. There is a number of the block*
- Lot 232 *a. There is a square of the lot. b. There is a number of the lot.*
- Principal use R-2
a. There is type of the building according to use. b. There is type of the building according to building materials used.



5. Zone Detached/attached residential, detached double family permitted

a. *There is the specific use of a house.* b. *There is a location of the block*

6. Min. lot area

3000 S.F.	2545 S.F.
-----------	-----------

a. *There is a coincidence of the proposed lot area with the required one.*

b. *There is a difference of the proposed lot area with the required one.*

7. Min. frontage

30 FT.	25 FT.
--------	--------

a. *There is a coincidence of the proposed frontage with the required one.*

b. *There is a noncoincidence of the proposed frontage with the required one.*

8. Min. lot yard

30 FT.	25 FT.
--------	--------

a. *There is a coincidence of the proposed yard with the required one.* b.

There is a noncoincidence of the proposed yard with the required one.

9. Min. lot depth

100 FT.	101. 27 FT.
---------	-------------

a. *There is a coincidence of the proposed lot depth with the required one.*

b. *There is a noncoincidence of the proposed lot depth with the required one.*

10. Min. front depth

20'-0'' or prevailing	16'-0''
--------------------------	---------

a. *There is a coincidence of the proposed yard with the required one.* b.

There is a noncoincidence of the proposed yard with the required one.

11. Min. rear yard

20'-0''	20'-5''
---------	---------

a. *There is a coincidence of the proposed yard with the required one.* b.

There is a noncoincidence of the proposed yard with the required one.

12. Min. side frontage

3'-0'' (one) 6'-0'' (both)	3'-1''(one) 6'-2''(both)
-------------------------------	-----------------------------

a. *There is a coincidence of the proposed frontage with the required one.*

b. *There is a noncoincidence of the proposed frontage with the required one.*

13. Parking spaces.



1-1/2 spaces per dwelling unit	3
--------------------------------	---

a. There is a coincidence of the proposed parking spaces with the required ones. b. There is a noncoincidence of the proposed parking spaces with the required ones.

BUILDING CHARACTERISTICS

14. Construction type 5A *a. There is a type of building. b. There is a location of building.*

15. Building volume R5 *a. There is a type of building according to use. b. There is a type of building according to building materials used.*

16. Floor type Ground floor 1201 S.F.
 First floor 1224 S.F.
 Second floor 1224 S.F.

a. There are names of floors. b. There is a number, names and square of floors.

17. Building volume 36.720 CU.FT.

a. There is a magnitude of the space enclosed within the residence.

b. There is a type of building.

Task 8.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. Choose the correct sentences for the tables of the general characteristics of two family residence. Work in pairs.

1. The design load schedule includes big bottom chord dead.
2. Building characteristics represent information only about building volume.
3. Zoning chart consists of both maximum and minimum frontage.
4. Top chord live is bigger than top chord dead in design load schedule.
5. Design load schedule highlights information about load on roof and floors only.
6. Zoning chart represents smaller proposed than required width of lot.
7. Zoning chart refers to prevailing setback in minimum front yard.
8. Design load schedule doesn't represent information about wind gusts.
9. There is non-conforming minimum lot area in zoning chart.
10. Principal use in zoning chart is detached residential double family.



Supplementary exercises for speaking

Task 1.

You are trainees in an international civil engineering firm. Choose the typical orders of descriptions of the general characteristics of the construction project to say what there is/there is no in the construction project of two family residence. Work in pairs.

General notes- zoning chart-building characteristics-design load schedule-owner information-list of drawings-sheet index-site data- vicinity map-project data-building information-off street parking data-existing impervious area data

Example for you. There is a zoning chart. There is no sheet index.

Task 2.

You want to become trainees in an international construction company. You are given the probation task in order to check your knowledge of general characteristics. Say the meanings of words from general characteristics using the following substitution table. Work in pairs. One student has to write words from the second column of tables, another says what it means. Then change roles. Example Student 1 ground floor 1201 S.F. Student 2 There is the floor area with ground floor 1201 S.F. in building characteristics. Use the following phrases for expression of opinion agreement and disagreement, clarification of information with a partner.

1. There is.....	in building characteristics.
2. There is.....	in zoning chart
3. There is.....	in design load schedule

Phrases for the expression of opinion

To my mind/ in my opinion/ from my point of view

Phrases for agreement, disagreement, clarification of information

Agreement. I agree with you on that point. That's a fair suggestion. You have a strong point there. I have no objection. I approve of it. I have come to the same conclusion. I hold the same opinion. We are of one mind / of the same mind on that issue . I have to side with you on this one. No



doubt about it. I suppose so./I guess so. You have a point there. That's a good point.

Disagreement. I take a different view. I don't share his/her/your view. I think otherwise. I'd say the exact opposite. I totally disagree. No, I'm not so sure about that. That's not always true. I can't accept this point as being true. That's not always the case. That's not the way I see it.

Clarification of information. Could you be more specific? Could you clarify one point for me? Would you say that is a fair representation of your position? What do you mean by ...?

Task 3.

You want to become trainees in an international construction company. Discuss the data in general characteristics in accordance with owner's demands. Read the sample dialogue and make the similar one. Work in pairs. Use the phrases for agreement and disagreement, clarification of information with a partner and the expression of opinion from the previous exercise.

Customer We have a great lot on 5 acres, fabulous community. We want to build a two story hotel with a huge 1/3 acre backyard and one parking space. The second floor area should be bigger than the first floor area. Roof and floor should be made of light materials. Which data in general characteristics correspond to our demands?

Civil engineer The gross floor area with 4100 S.F. is suitable for the 5 acres' lot.

Customer That's a good point. What about my demands about the second floor?

Civil engineer The second floor area is bigger than the first floor area

Customer That's a fair suggestion. Could you be more specific about parking space?

Civil engineer There is one parking space in accordance to your demands.

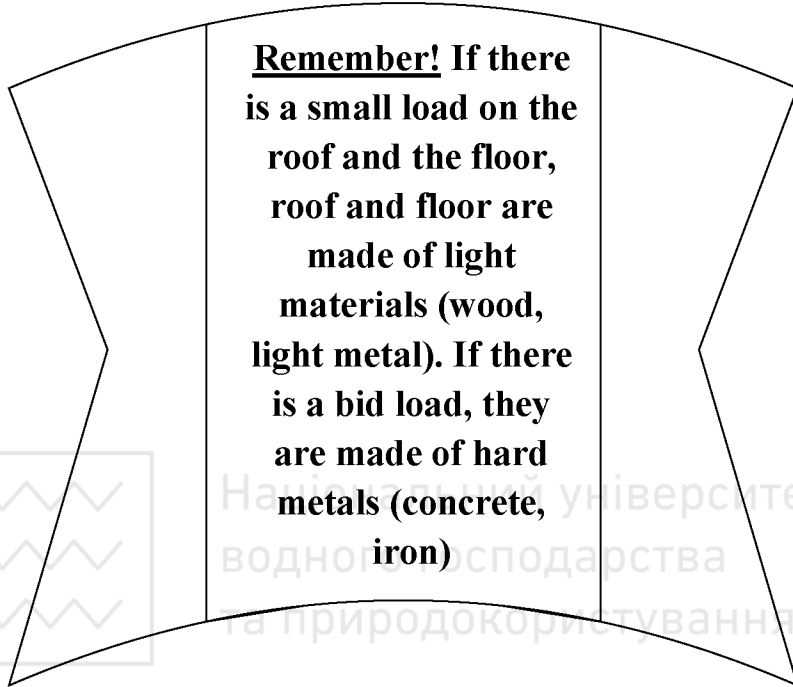
Customer Have you taken into account that roof and floor should be made of light materials?

Civil engineer I approve of it. Roof and floor should be made of light materials because of small load in design load schedule.

Customer We are of the same mind on that issue. You've taken into consideration my demands. Thanks.



Civil engineer You are welcome.



Task 4.

You want to become trainees in an international construction company. Say if sentences correspond to the content of general characteristics. Explain how you have arrived to such answer. Work in pairs. Use the following phrases for expressing opinion.

<p><u>Phrases for expressing opinion</u></p> <p>To be perfectly frank</p> <p>Without a shadow of a doubt,.....</p> <p>I really don't think..... or I really do think.....</p> <p>I'm positive that.....</p> <p>Quite the opposite...</p> <p>I definitely agree/disagree...</p> <p>I'm no expert on this, but.....</p>	
<p>Top chord live is bigger than top chord dead in design load schedule.</p>	<p>because it is 30 PSF but top chord dead is 10 PSF.</p>



1. The design load schedule includes big bottom chord dead.
2. Building characteristics represent information only about building volume.
3. Zoning chart consists of both maximum and minimum frontage.
4. Top chord live is bigger than top chord dead in design load schedule.
5. Design load schedule highlights information about load on roof and floors only.
6. Zoning chart represents smaller proposed than required width of lot.
7. Zoning chart refers to prevailing setback in minimum front yard.
8. Design load schedule doesn't represent information about wind gusts.

Task 5.

You want to become trainees in an international construction company. Discuss the general characteristics of the construction project “Two family residence” in accordance with such owners demands as: large area, much parking and living space, coincidence with required norms. Work in pairs.

Task 6.

You are a trainee in an international civil engineering firm. You are given the list of words related to the general characteristics of different construction projects. Say the components of the general characteristics of construction projects consists of and mention the common part of general characteristics of two family residence with mentioned below. Example for you: There is a roof live in design live load of clover island lighthouse. It is common with the design load of two family residence. Work alone.

New residence for Seymor and Patricia Schor

Project data: proposed new single family residence

Site information: building height 18'-6"

Vicinity map

The foust house

Sheet index: sheet number, drawing

1054 house

Design loading criteria: live load: roof 25 PSF

wind loads: wind speed 85 MPH



Clover Island Lighthouse

Design live loads: roof live or snow 20 PSF

Deflection limits: floor live load 360

Cary church

Site data: building setbacks: 20 Ft front, 10 Ft side

Building information: proposed building floor area 19, 159 Ft²

Off street parking data: Existing parking spaces=102

Two family residence (See Supplement 1)

Task 7.

You want to become a trainee in an international civil engineering firm. Describe the general characteristics of the construction project. Make use of the substitution table. Work alone.

1. The general characteristics of the construction project “Two family residence”	has	design load schedule,
2. Zoning chart	consists of
3. There is a	noncoincidence with	required norms in.....
4. Design load schedule Building characteristics	includes

Task 8.

You want to become a trainee in an international civil engineering firm. Your understanding of the construction project is going to be checked. Make up the presentation of the general characteristics of the construction project chosen by you which has common items with “Two family residence”. Work alone. See Supplement 4.



Progress check

After the unit “**GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT**” test your professional and linguistic competence. Mark the correct variant.

1. What does zoning chart of this construction project mean?
 - a. Chart which determines the number of floors, area of floors.
 - b. Chart which determines limits of bulk and yard.
2. What does design load schedule of this construction project mean?
 - a. Schedule which consists of lot depth and width.
 - b. Schedule which consists of chord on roof and floors.
3. What does zoning chart of this construction project include?
 - a. Address, number of block, number of lot, type of zone, principal use of the building, limits of bulk and yard.
 - b. Address, number of block, type of lot, number of zone, principal use of the building, maximum bulk and yard.
4. What does design load schedule of this construction project include?
 - a. Type of roof, number of floors, maximum load on floors, top chord dead.
 - b. Top chord live, top chord dead, bottom chord dead on roof, load on living spaces and sleeping spaces, attic storage, speed of wind.
5. Which words from general characteristics have mistakes?
 - a. Yard, area, bottom chord dead, building volume, address.
 - b. Yart, area, bottom chod dead, bulding volume, adress.
6. What are the correct combinations of words with decimals?
 - a. 100, 30 FT. — parking space; 20’-0’’ – yard, R5 – address; 1201 S.F. – floor; 36.720 CU. FT. – building volume; 30, 10, 50 PSF – live and bottom chord on the roof and floors.
 - b. 100, 30 FT. – lot depth, lot width; 20’-0’’ – yard, R5 – use group; 1201 S.F. – floor; 36.720 CU. FT. – building volume; 30, 10, 50 PSF – live and bottom chord on the roof and floors.
7. Which words are odd in general notes of the construction project?
 - a. Design load schedule, zoning chart.
 - b. Shop drawings, permits.
8. Which words are odd in the tables of general characteristics of the construction project?
 - a. Product options, substitutions, substantial completion.
 - b. Lot, zone, floor areas, living spaces, top chord live.



After the unit “GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT” fill in the following table about what you have known before and what you have learnt. There is an example of how to do it.

What I have known before	What I have learnt
the word construction project	detailed information about items in general characteristics of construction project, how to make assumptions about layouts on the basis of general characteristics of the construction project

After the unit “GENERAL CHARACTERISTICS OF THE CONSTRUCTION PROJECT” fill in the following table about what you know and what you can. Estimate your progress and write your opinion about how to improve your progress if you do not have good results and how to continue your progress if you have good ones. There is an example of how to do it.

I know detailed information about items in general characteristics.	Well	Badly
	How to continue progress to search for more information about it on the internet, look through the suggested general characteristics and compare it with a new one.	How to improve knowledge to repeat the learnt words for several times, to watch proposed youtube videos, to fulfill tasks for the second time individually without prompts.
I can make assumptions about the layouts on the basis of general characteristics.	How to continue progress.	How to improve ability.



UNIT 2. PLOT PLAN





Lead in. Answer the following questions at home. Be ready to discuss them in group.






What is the plot plan? Which synonyms for plot plan do you know? What is the correct image of the plot plan?

What are its main components? What can be seen on it? Which tables of general characteristics is it connected with?

Task 1.

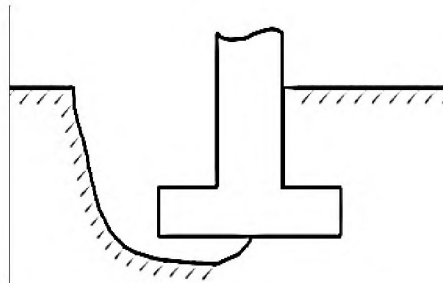
You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the components of a plot plan. Match the words to their symbols. Work alone.

Plot plan

1. Property line 	a. 
2. Property shrub	b. 
3. Building entrance	c. 
4. Planter	d. 



5. Existing wall



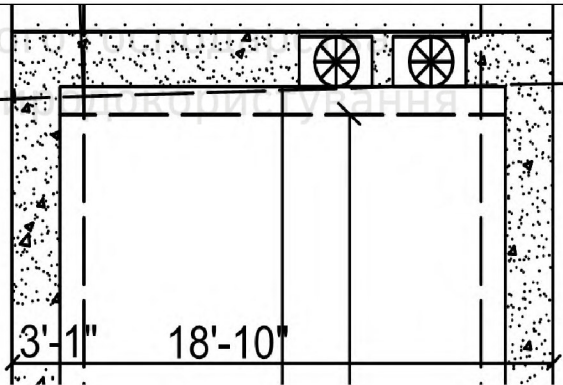
e.

6. Footing



f.

7. Adjacent building



g.

8. Rear building line



h.




Task 2.

You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the plot plan of the construction project. Match the words (1-16) to their transcriptions and translations (a-c). Work alone.

Components of plot plan

1. Wind rose	a. [↓wɑ:ɪnd↑rəʊz] вітер b. [↓wɪənd↑rəz] порив вітру c. [↓wɪnd↑rəʊz] роза вітрів
2. Planter	a. ['plɑ:ntə] місце для декоративних рослин b. ['pləntə] фермер c. ['plænt] садівник
3. Building entrance	a. [↓bɪldɪŋ↑ɑ:ntɾən(t)s] частина будівлі b. [↓bɪldɪŋ↑əntɾənz] вихід з будівлі c. [↓bɪldɪŋ↑entrən(t)s] вхід до будівлі
4. Property line	a. [↓prɒpəti↑laɪn] місце власності b. [↓prɒpəti↑laɪn] межа землеволодіння c. [↓prə:ptɪl↑laɪn] майно
5. Property gas line	a. [↓prɒpəti↓gæs↑laɪn] газопровід землеволодіння b. [↓prə:ptɪ↓gæs↑laɪn] газова труба c. [↓prɒpəti↓gɑ:s↑laɪn] межа землеволодіння



<p>6. Property sanitary line</p>	<p>a. [↓prɔptɪ↓sɑ:nɪt(ə)rɪl↑laɪn] санітарна межа b. [↓prɔrə:trɪ↓sɔnɪt(ə)rɪl↑laɪn] санітарна частина c. [↓prɔrətɪ↓sænɪt(ə)rɪl↑laɪn] санітарна лінія землеволодіння</p>
<p>7. Property shrub</p>	<p>a. [↓prɔrətɪ↑ʃrʌb] кущ землеволодіння b. [↓prɔrətɪ↑ʃrʌb] межа землеволодіння c. [↓prɔrətɪ↑ʃrʌb] дерево землеволодіння</p>
<p>8. Point of beginning</p> 	<p>a. [↓pɔɪnt↓ɔv↑bɪ'gɪnɪŋ] точка початку земельної ділянки b. [↓pɔɪnt↓ɔv↑bə'gɪnɪŋ] місце розташування земельної ділянки c. [↓pɔɪnt↓ɔf↑bɪ'gə'nɪŋ] межа земельної ділянки</p>
<p>9. Adjacent</p>	<p>a. [ə'dʒes(ə)nt] багатопверховий b. [ɔ'dʒeɪs(ə)nt] далекий c. [ə'dʒeɪs(ə)nt] сусідній</p>
<p>10. Balcony</p>	<p>a. ['bælkəni] балкон b. ['beɪlkəni] веранда c. ['bɔlkəni] конструкція балкона</p>

Task 3.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Match a word in the left-hand column with a word on the right to form phrases. There are two odd ones. See Supplement 3. Work alone.

<p>1. Side</p>	<p>a. 2-1/2 story building</p>
<p>2. Adjacent</p>	<p>b. yard</p>



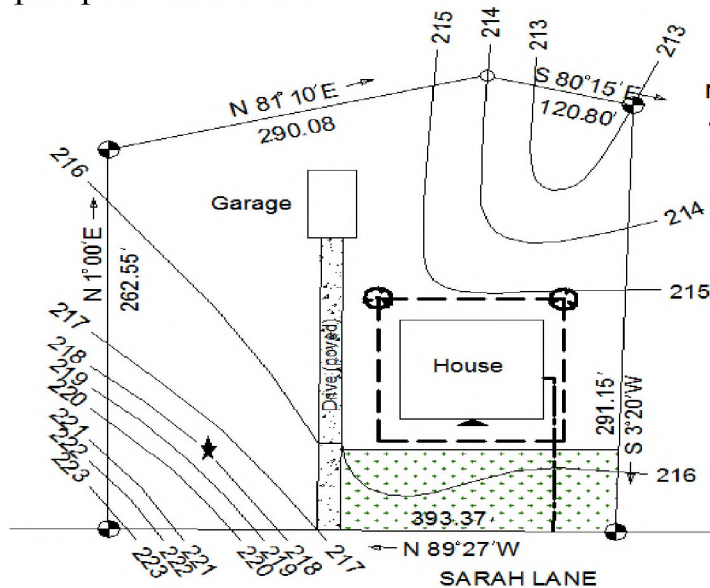
3. Property	c. landscaped area
4. Front	d. line
5. Natural	e. grade
6. Rear	f. entrance
7. Natural gas	g. shrub
8. Building	h. beginning
9. Point of	i. building
10. Property gas	k. rose
11. Property sanitary	
13. Existing	
14. Wind	

Task 4.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Choose the most appropriate word combinations for the plot plan of the house 1. Work alone, then in pairs.

- Property line-property landscaped area- wind rose.
- Shape of the plot plan-wind rose-topographical lines-particular items-orientation of the building-scale-symbol legend-.
- Wind rose-symbol legend-overall dimensions-adjacent buildings-doors-driveway-house.

See the plot plan of house 1.



Plot plan of the house 1



Task 5.

You want to become a trainee in an international construction company. You have to repeat typical words for the plot plan. Find plural, singular forms and possessive case of words which are used in the notes for the plot plan of the construction project Work alone.

Example: residence's foundation – the possessive Case

Building's foundation, elements, circumstances.

	<p>Remember!</p> <p>The possessive Case is formed by adding “’s” (the apostrophe s) or only “ ’ ” (the apostrophe) to the noun denoting a living being.</p> <p>N’s / N</p> <p>Plural – ending s for a noun</p>	
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Task 6.

You want to become a trainee in an international construction company. You have to test your language proficiency. Choose the most appropriate rules for the words below from the construction project. Work alone, then in pairs.

	<p>Remember!</p> <p>After (c, s, x, z, ss, ch,sh, ge) the ending –es is pronounced as [ɪz], after (p, k,t, ph, th,f) the ending –s is pronounced as [s], after (b,d,g, l,m, n,ng, r,v,y) and vowels – s is pronounced [z]</p>	
--	--	--

Example: after (p, k,t, ph, th,f) is pronounced as [s] – remarks

Building's foundation, circumstances, elements, walls.



Task 7.

You want to become a trainee in an international construction company. You have to test your language proficiency. Choose the most appropriate rules for the sentences below from the construction project. Work in the groups of 3-4 students.

Example: Written dimensions shall govern – **rule 1**.

1. Go to protect adjacent building's foundation against the elements and brace the existing wall.
2. Under no circumstances shall the existing footing be undermined.
3. Driveway ditches to have disposal water.
4. Concrete paved area shall be around the building.
5. The plot plan is based on a survey.

Remember! Rule 1. Constructions with the modal verb shall are synonymous with constructions with have to and mean necessity of doing something. Contractor shall check, verify and maintain all dimensions= Contractor has to check, verify and maintain all dimensions

Rule 2. Do not scale drawings – imperative sentence means order.

Rule 3. This floor plan is based on the calculations for the residence – passive voice.

Rule 4. All exterior walls to use brick – infinitive sentence is used to talk about habitual actions. Infinitive sentence=present simple.

Task 8.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The plot plan”. Circle the odd word out which does not fit the topic “The plot plan”. Work alone.

A property line, a property landscaped area, a property concrete paved area, a property shrub, a property water line, a wind rose, a building entrance, a point of beginning, a landscaped area, a bifold door.

Task 9.

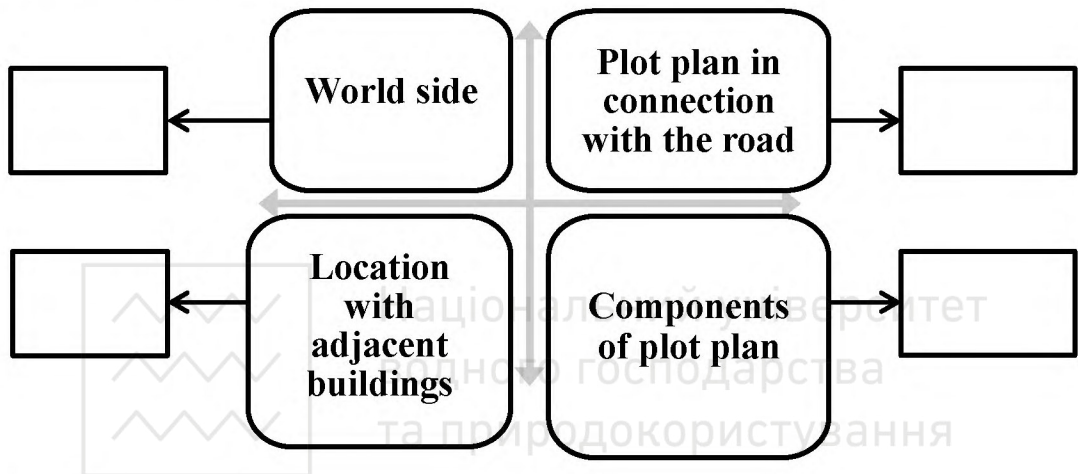
You want to become a trainee in an international construction company. You have to repeat the words for the topic “The plot plan”. Listen to the lecturer and put + for the words related to the topic “The plot plan.” Work alone.



Property line, wind rose, sliding door, adjacent building, bifold door, single door, vented window, design load schedule, plot plan, property shrub, point of beginning.

Task 10.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The plot plan”. Listen to the words for the topic “The plot plan”. Fill in the following diagram. Work alone.



Task 11.

Student A – a civil engineer. Student B – a trainee. Student A draws symbols fit for the plot plan . Student B names the symbols. Work in pairs.



There is an example for you. Student A.
planter.

Student B.

Task 12.

You want to become a trainee in an international construction company. You have to repeat the words from notes to the plot plan with ending -s. Classify words with the endings [z], [s], [ɪz] and nouns in possessive case. Work alone.

Example for you: building’s foundation – z.

Building’s setback, yards, planters, trees.



Task 13.

You want to become a trainee in an international construction company. You are to understand plot plan notes. Find sentences with the modal verb *shall* and infinitive in active and passive voice and choose the correct meanings for them. Work alone.

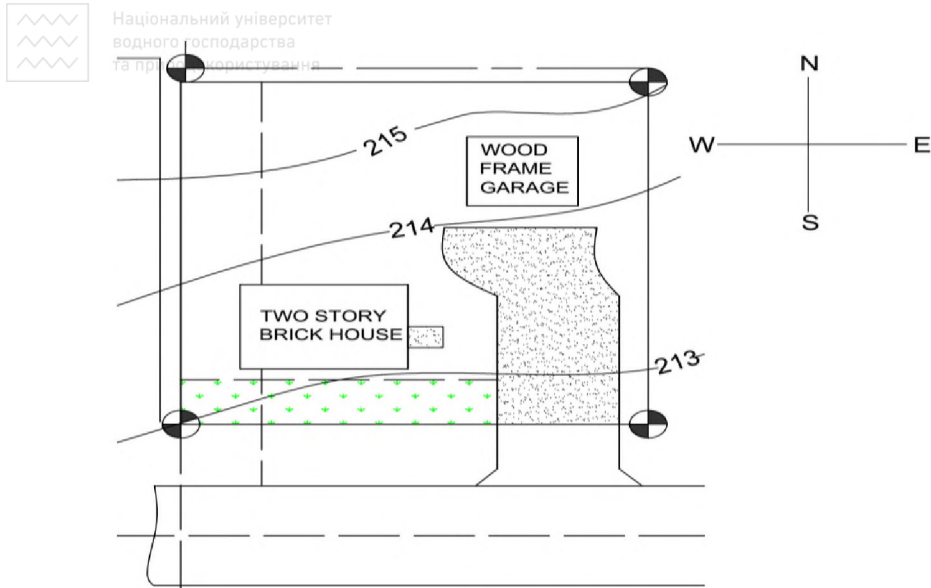
Example for you: All interior walls shall be wall type B. – sentence with the modal verb shall and infinitive in active voice. b. Information about wall characteristics.

1. Go to protect adjacent building's foundation against the elements and brace the existing wall. a. The necessity of some work to be done with foundation. b. The type of foundation in the future.
2. Under no circumstances shall the existing footing be undermined. a. Prohibition for footing. b. The necessity of footing.
3. Driveway ditches to have disposal water. a. Prohibition for driveway. b. Peculiarities for driveway ditches.
4. Concrete paved area shall be around the building. a. The type of paved area in the future. b. The presence of paved area of specific type around the building.

Task 14.

You want to become a trainee in an international construction company. You are to understand plot plan notes. Choose the sentences which are appropriate for the plot plan A below. Work in pairs.

1. There is a landscaped area around the house.
2. There is a wind rose to the south.
3. There is a property concrete paved area near the house.
4. There is an impervious coverage of the lot area.
5. There is a property shrub near the house.
6. There is a point of beginning on the house.
7. There are many adjacent buildings near the house.
8. There is a property line on the lot area.
9. There are rear and front yards.
10. There is a driveway near the house.
11. There is a wood frame garage not far from the house.
12. There is a balcony near the house.
13. There are property and sanitary gas lines.



Plot plan A

Task 15.

You want to become a trainee in an international construction company. You have to show your understanding of the notes' content. You are shown notes with the incorrect word order. Make the right word order in the sentences below. Work alone.

1. Foundation to go protect adjacent building's foundation against brace the elements and the existing wall.
2. Undermined shall under no circumstances the existing footing be.
3. Water driveway ditches to have disposal.
4. Area concrete paved be around the shall building.

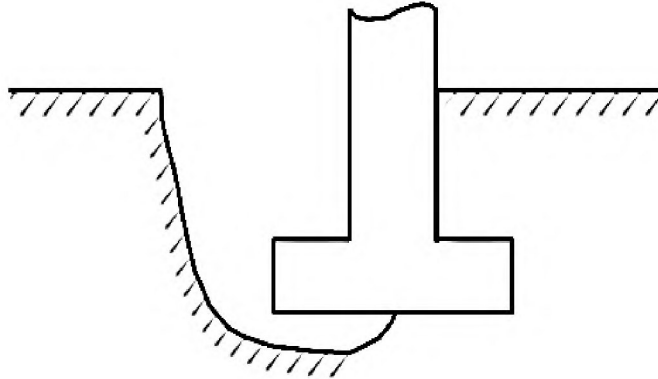
Task 16.

You want to become a trainee in an international construction company. You have to show your understanding of the notes' content. Assess the content of the sentences with their images. Match the content of the sentences (1-3) with the correct images (a-e). There are two odd ones. Work alone.

1. Brace the existing wall.
 2. Existing footing shall be undermined.
 3. Concrete paved area shall be around the building.
- a. image 1; b. image 2; c. image 3.; d. image 4; e. image 5.

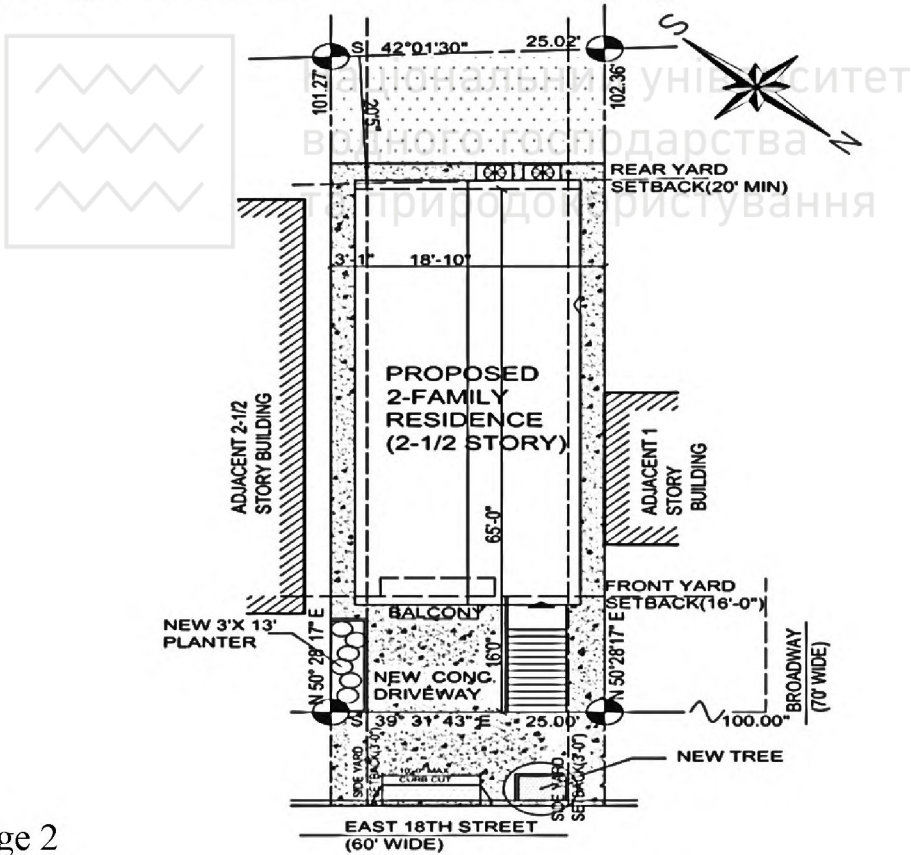


Images for notes



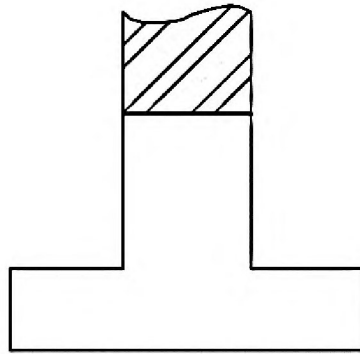
a. image 1

1. Brace the existing wall.
2. Existing footing shall be undermined.
3. Concrete paved area shall be around the building.



b. image 2

1. Brace the existing wall.
2. Existing footing shall be undermined.
3. Concrete paved area shall be around the building.

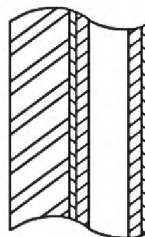
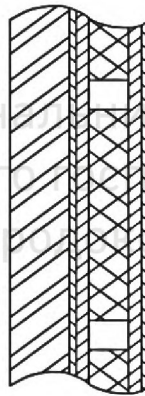


c. image 3

1. Brace the existing wall.
2. Existing footing shall be undermined.
3. Concrete paved area shall be around the building.

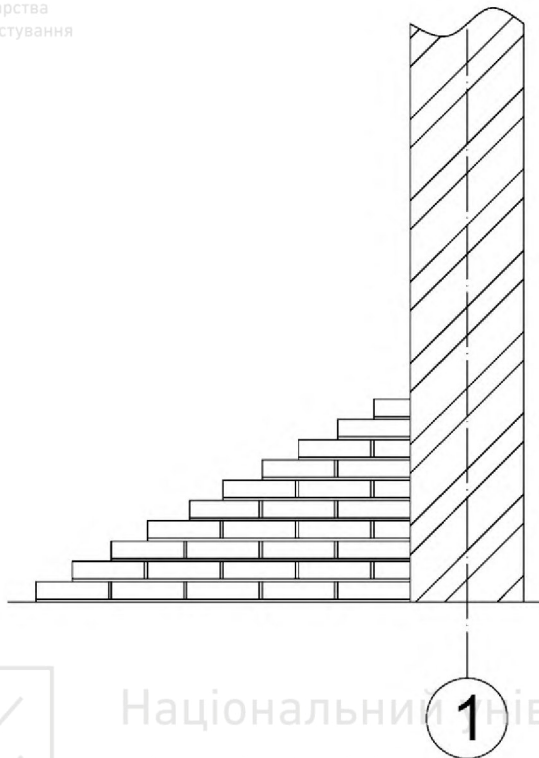


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d. image 4

1. Brace the existing wall.
2. Existing footing shall be undermined.
3. Concrete paved area shall be around the building.



e. image 5

1. Brace the existing wall.
2. Existing footing shall be undermined.
3. Concrete paved area shall be around the building.

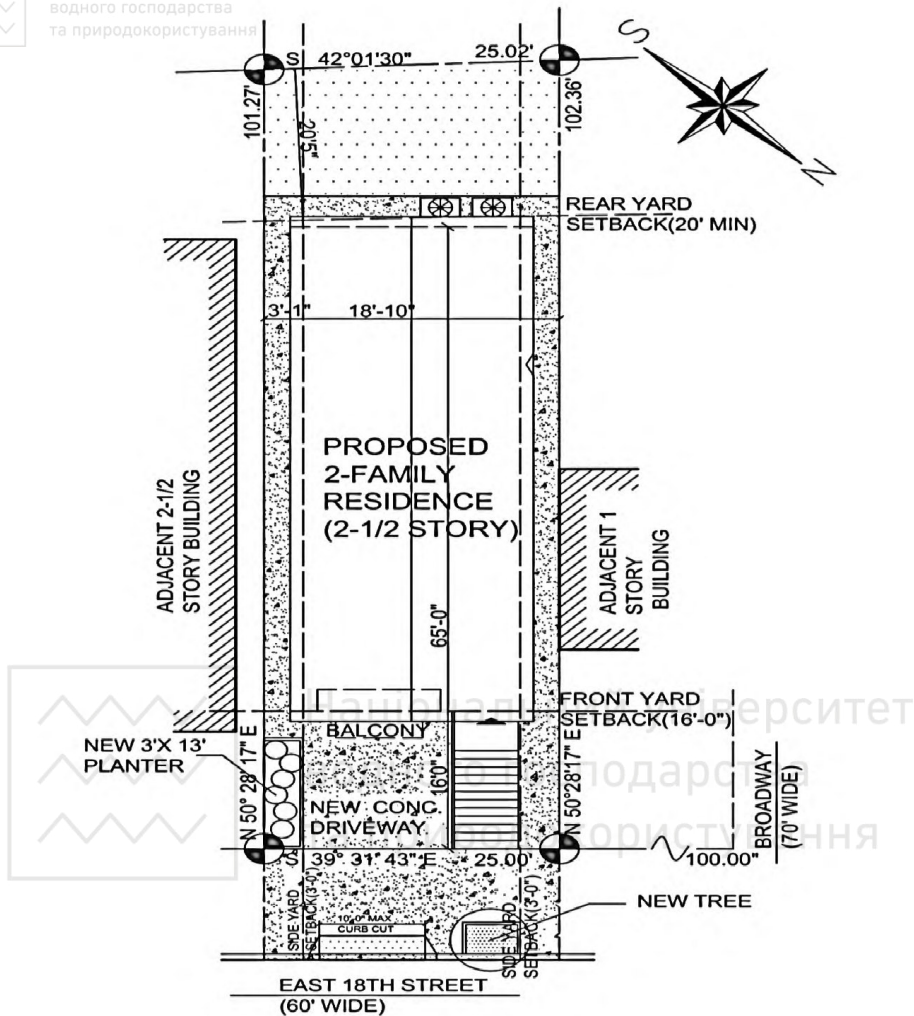
Task 17.

You want to become a trainee in an international construction company. You have to show your understanding of the plot plan. Find the words from the list which belong to the topic “Plot plan” and are not written on the plot plan A below. Show them on the layout. Work in pairs.

Double window, wind speed, planter, landscaped area, interior wall, wind rose, building entrance, concrete paved area, top chord live, rear yard, point of beginning, adjacent story building, setback, side yard, shrub, property gas line, property sanitary line, property line, parking space, bottom chord dead, footing, design load schedule, sheathing.



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Plot plan A

Supplementary exercises for speaking

Task 1.

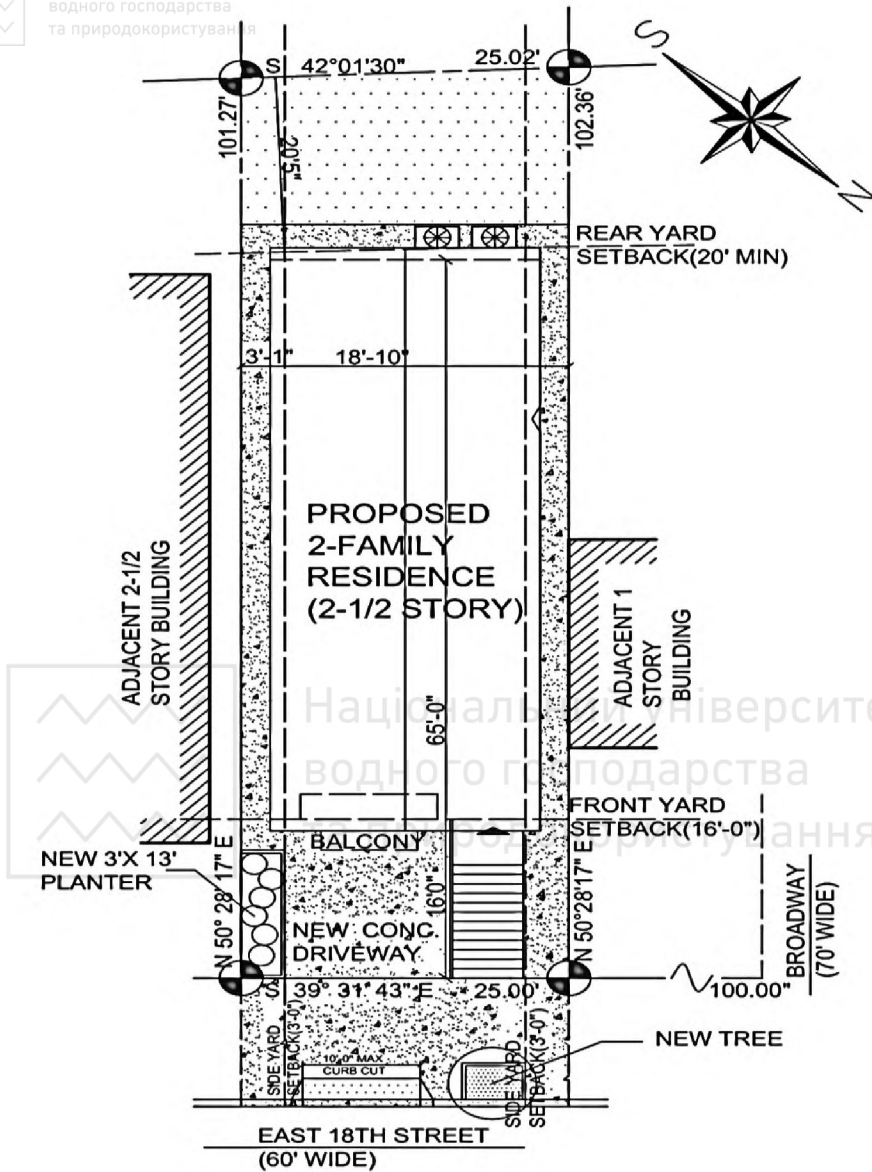
You want to become trainees in an international construction company. Choose the typical orders of descriptions of the plot plan to say what there is/there is no on the following plot plan 1. Work in pairs.

Example for you. There is a driveway. There is no symbol legend.

- Property line-building restriction-driveway-house-grades
- Shape of the plot plan-topographical lines-particular items-orientation of the building-scale-symbol legend
- Symbol legend-overall dimensions-adjacent buildings-doors-driveway-house.



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Plot plan A

Task 2.

You want to become trainees in an international construction company. You are given the probation task in order to check your knowledge of plot plan symbols. Describe what is around the family residence on the plot plan using the following substitution table. See supplement 1 and 2. Work in pairs. One student has to draw symbols, another describes the plot plan with it. Then change roles.



Example Student 1.
front of the house.

Student 2. There are new planters in

1. There are.....	in front of the house
2. There are.....	at the back of the house
3. There is.....	right to the house

Task 3.

You want to become trainees in an international construction company. Discuss the plot plan for family residence in accordance with owner's demands: driveway made from environmentally friendly materials, much space for children in front of the house, landscaped area in front of and behind the house, not far from adjacent buildings, the location in accordance with the wind rose. Read the sample dialogue and make the similar one. Use the phrases for agreement and disagreement, clarification of information with a partner and the expression of opinion. Work in pairs.

Phrases for the expression of opinion

To my mind/ in my opinion/ from my point of view the plot plan suits (doesn't suit)/ fits (doesn't fit) the demands of the owner because the house is located/ not located near the road/ too far to the road.

To my mind/ in my opinion/ from my point of view the plot plan suits (doesn't suit)/ fits (doesn't fit) the demands of the first /second family because the paved area near the building is/ isn't made of stone/tile/concrete.

To my mind/ in my opinion/ from my point of view the plot plan suits (doesn't suit)/ fits (doesn't fit) the demands of the first /second family because there is/there are landscaped areas/ shrubs/ planters in front of/behind/ to the right of /to the left of the house.

There are the following owner's demands:

driveway made from environmentally friendly materials, much space for children in front of the house, landscaped area in front of and behind the house, not far from adjacent buildings, the location in accordance with the wind rose.



T1 In my opinion the plot plan doesn't suit the demands of the owner because the house is located far to the road but the owner wants near the road.

T2 I hold the same opinion.

T1 What do you think about the usage of environmentally friendly materials?

T2 Concrete is not an eco friendly building material. As you see both driveways are made of concrete/brick Therefore this plot plan doesn't correspond to owner's demands

T1 There is enough space for children.

T2 I take a different view. There is no much space for children due to large landscaped area / driveway

T1 Could you be more specific?

T2 There are too many planters. Therefore this plot plan doesn't correspond to owner's demands

T1 As for another demand, to my mind the location of the house is not in accordance with the wind rose. It should be to the north not to the east.

T2 I have to side with you on this one.

Task 4.

You want to become trainees in an international construction company. Choose possible planning and construction concepts (A, B, C, D) for the plot plan of two family residence. Explain how you have arrived to such answer. Use the following phrases for expressing opinion. Work in pairs.

<u>Phrases for expressing opinion</u>		
To be perfectly frank		
Without a shadow of a doubt,.....		
I really don't think..... or I really do think.....		
I'm positive that.....		
the planning concept A (such part of planning/constructive concept as....)	doesn't correspond suit, fit / corresponds, suits/fits to such planning and constructive as...	because...



a. Planning concept 1

The staircase has to come out the property sanitary line. The house has to be located closer to the property sanitary line.

b. Planning concept 2

The plot plan has to be accessorized with landscaped area. There should be some tall shrubs on the right of driveway and some lower shrubs on the left of the porch.

c. Constructive concepts 1

Concrete driveway has to be changed into stone one from the viewpoint of usage of environmentally friendly materials. There should be stone paved area around the house

d. Constructive concepts 2

There should be concrete paved area around the house. Concrete driveway hasn't to be changed.

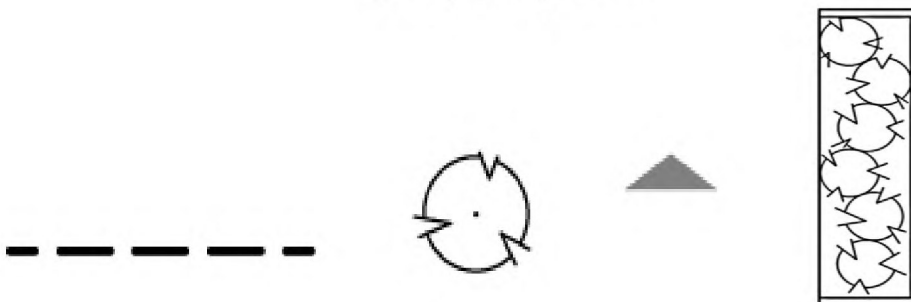
Task 5.

You want to become trainees in an international construction company. Discuss the plot plan of the construction project “Two family residence” and possible engineering concepts for it. Work in pairs.

Task 6.

You want to become trainees in an international construction company. You are given the list of symbols-components for a plot plan. Say if they are shown on the plot plan from Supplement 1. See Supplements 1 and 2. Work in pairs.

Plot plan symbols



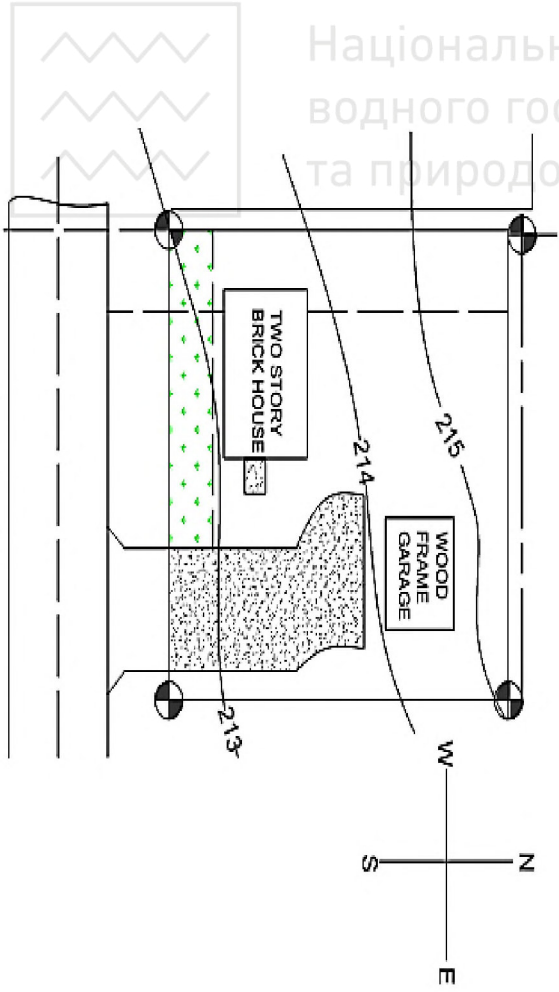
There is the planter on the plot plan.



Task 7.

You want to become trainees in an international construction company. Describe the plot plans A and B of the construction project. Make use of the substitution table. Work in pairs.

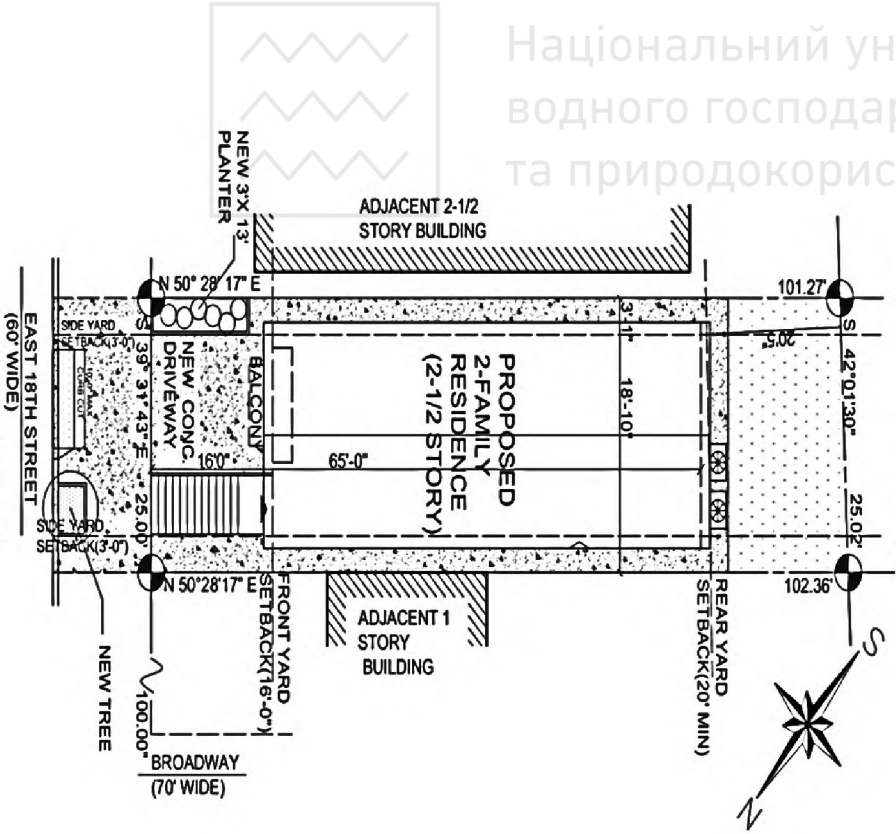
1. The first/ the second plot plan	has	three basic lines such as... four basic lines such as...
2. There are	bushes and trees bushes	in front of it
3. New planter	is located	at the back of to the right of it.....
4. There is	a landscaped area	behind it behind and in front of it
5. There are	adjacent buildings
6. There is	a driveway
7. The plot plan	has	a wind rose.....
8. There are	rear and front yards
9. There are	setbacks



Plot plan B

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Plot plan A





Task 8.

You want to become a trainee in an international construction company. Explain the engineering concepts for the plot plan from the supplement 1. Make use of the substitution table. Work alone.

Owner's demands: 1. a lot of landscaped area near the house; 2 the house has to be far to adjacent buildings 3. environmentally friendly building material for the driveway has to be chosen.

Phrases for expressing opinion

In my opinion, this planning/constructive concept (such part of planning/constructive concept) would be better because....

To my mind this planning/constructive concept (such part of planning/constructive concept) suits/fits (doesn't suit/doesn't fit) the plot plan because.....

To my way of thinking, such part of planning/constructive concept is fine because.....

In my view, this planning/constructive concept such part of planning/constructive concept as..... is best because.....

Owing to enough landscaped areas	there is no need to accessorize the plot plan with additional ones	
That's why the planning concept	doesn't correspond to the plot plan...	
The plot plan	corresponds to the planning concept 1...	because...

a. Planning concept 1

The staircase has to come out the grade. The house has to be located closer to the grade.

b. Constructive concept 1

Concrete driveway has to be changed into wooden one.



c. Planning concept 2

Planters have to be added behind, to the right and to the left from the house. The distance between the house and adjacent buildings has to be decreased.

d. Constructive concept 2

Concrete driveway has to be changed into steel driveway.

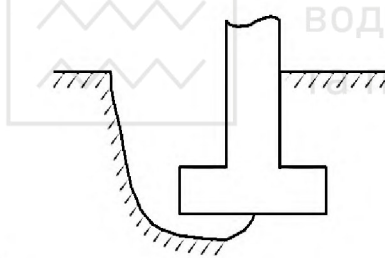
Task 9.

You want to become a trainee in an international construction company. Your understanding of the construction project is going to be checked. Make up the presentation of the layouts and engineering concepts for them. See supplement 4. Work alone.

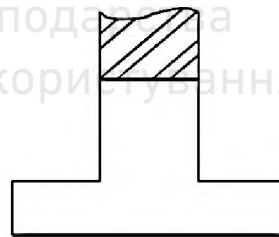
Progress check

After the unit “**PLOT PLAN**” test your professional and linguistic competence. Mark the correct variant.

1. Which of the drawings does this sentence correspond to?
Brace the existing wall.

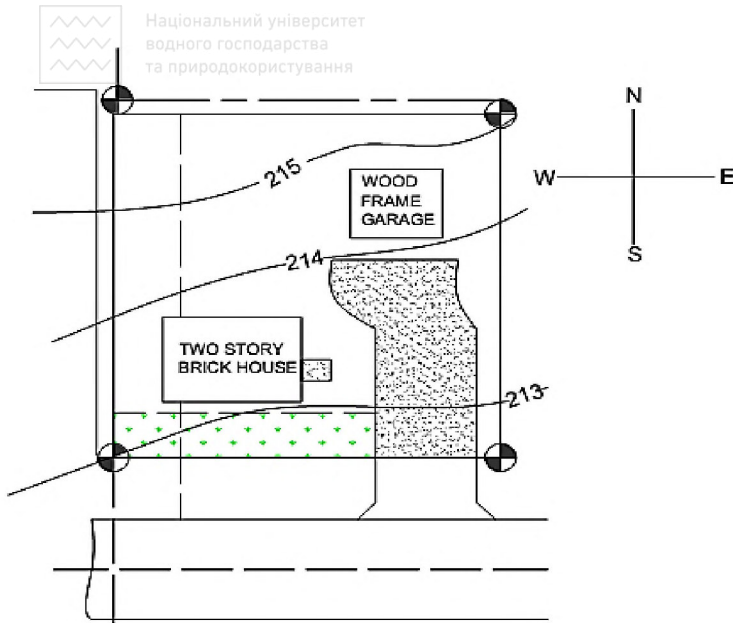


a.

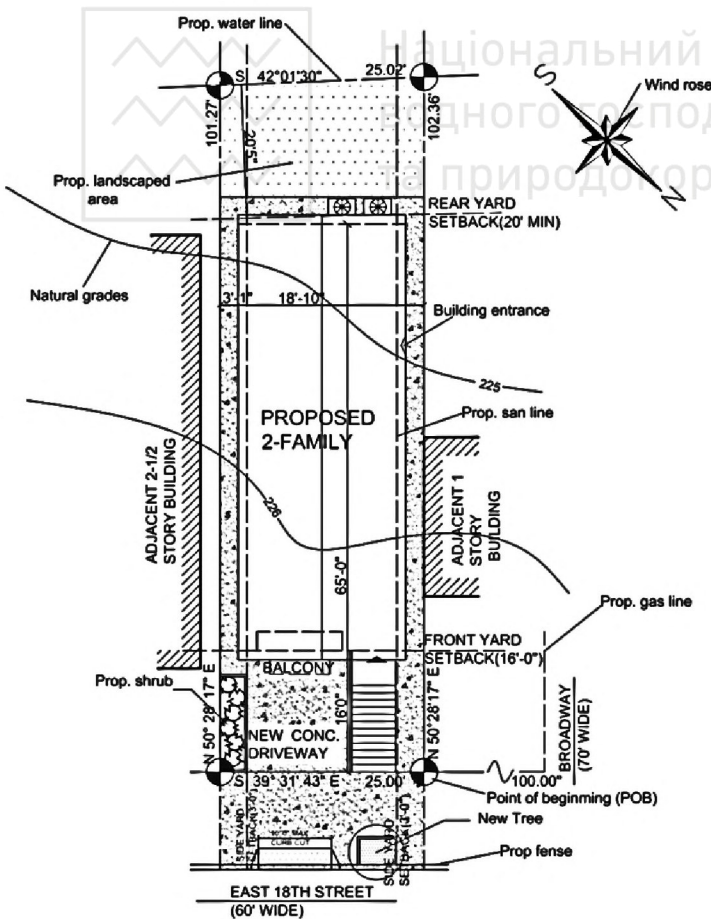


b.

2. Which of the following words only belong to the topic “Plot plan”?
- Planter, yard, driveway, shrub, grade, property sanitary line, building entrance, point of beginning, property landscaped area
 - Driveway, wind rose, top chord live, design load schedule, general notes.
3. Which of the following layouts with notes has incorrect grammar structure?



a. Driveway to have water disposal ditches. Concrete paved area shall be around the building. Existing footing shall be undermined.



b. Under no circumstances existing footing shall be undermined. Go to protect adjacent buildings. Brace the existing wall.



After the unit “**PLOT PLAN**” fill in the following table about what you have known before and what you have learnt. There is an example of how to do it.

What I have known before	What I have learnt
the word construction project	detailed information about items in general characteristics of construction project, how to make assumptions about layouts on the basis of general characteristics of the construction project

After the unit “**PLOT PLAN**” fill in the following table about what you know and what you can. Estimate your progress and write your opinion about how to improve your progress if you do not have good results and how to continue your progress if you have good ones. There is an example of how to do it.

	Well	Badly
I know detailed information about a plot plan.	How to continue progress to search for more information about it on the internet, look through the suggested plot plans and compare it with new ones.	How to improve knowledge to repeat the learnt words for several times, to watch proposed youtube videos, to fulfill tasks for the second time individually without prompts.
I can make assumptions about the layouts.	How to continue progress.	How to improve ability.



UNIT 3. FLOOR PLAN





Lead in. Answer the following questions at home. Be ready to discuss them in group.



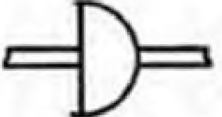




What is the floor plan? Which synonyms for floor plan do you know?

What are its main components? What can be seen on it? Which tables of general characteristics is it connected with?

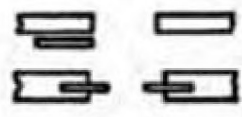



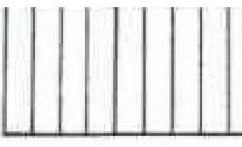
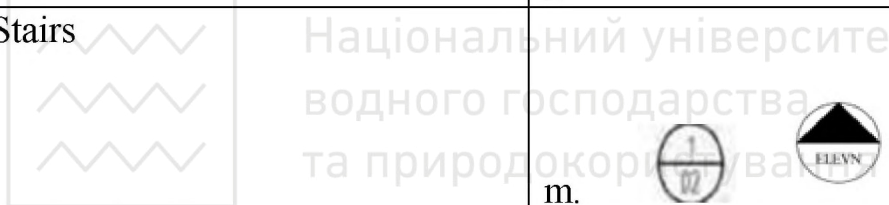
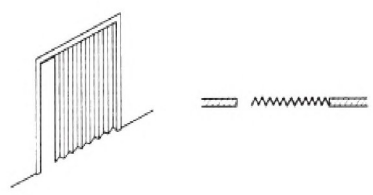
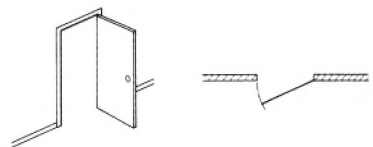
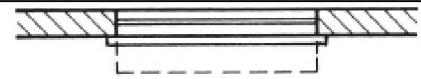
Task 1.

You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the components of a floor plan. Match the words (1-19) with their symbols (a-t). There is the odd one. See Supplement 2. Work alone.

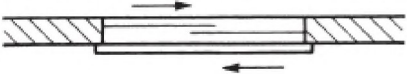

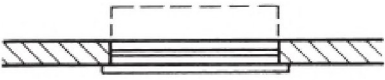
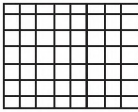
Components of the floor plan

1. Bifold door ['baɪfəʊld] [dɔː] подвійні двері	a. 
2. Double door interior ['dʌbl] [dɔː] [ɪn'tɪəriə] подвійні внутрішні двері	b. 
3. Double hung window	c. 
4. Double acting single door	d. 
5. Sliding doors	e. 
6. Single, opening in window	f. 
7. Bifold door	g. 

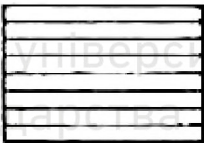
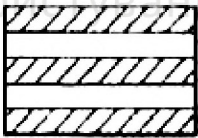
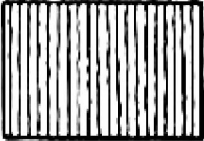


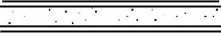




8. Vented window	h. 
9. Bay window	i. 
10. Double hung window	j. 
11. Casement windows	k. 
12. Elevation indication	l. 
13. Stairs	m. 
14. Swing door	n. 
15. Accordion door	o. 
16. Sliding	p. 

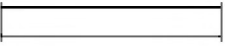


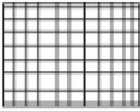
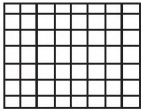


17. Awning	 <p>q.</p>
18. Hopper	 <p>r.</p>
19. Jalousie	 <p>s.</p>
	 <p>t.</p>

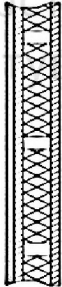
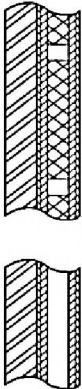
Building materials

1. Plywood	 <p>a.</p>
2. Slate	 <p>b.</p>
3. Wood	 <p>c.</p>
4. Tile, ceramic, structural, facing	d. Floor areas left blank
5. Brick	 <p>e.</p>
6. Concrete block	 <p>f.</p>
7. Concrete	 <p>g.</p>
8. Gypsum wallboard	 <p>h.</p>
9. Cut stone	 <p>i.</p>

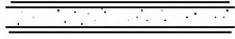
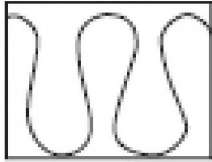
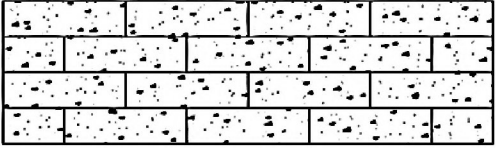

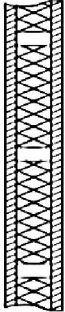


10. Rubble	j. 
11. Plaster	k.
12. Glass	l. 
13. Floor tile	m. 
14. Structural steel	n. 
	o. 


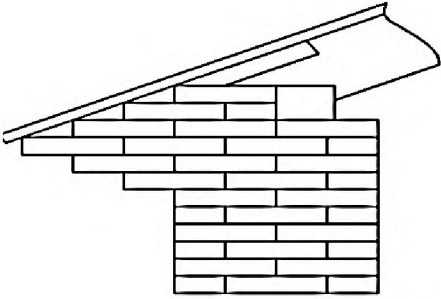

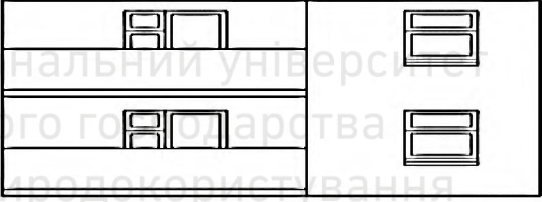
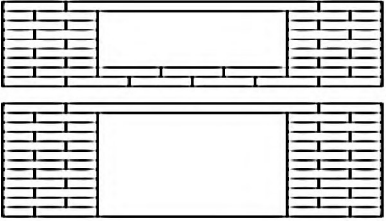
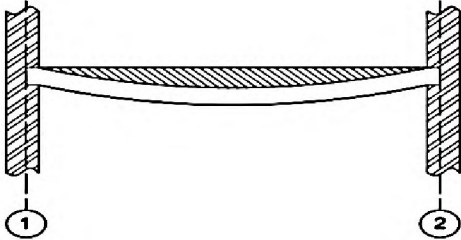
Wall schedule

1. Gypsum wallboard	a. 
2. Batt insulation	b. 



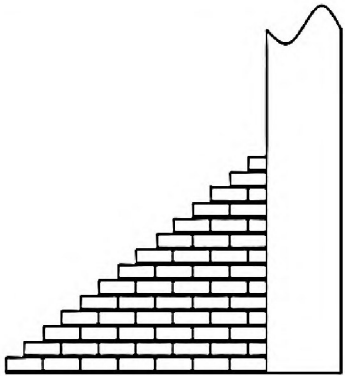
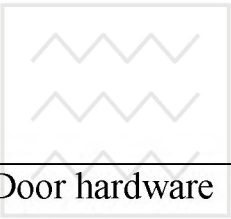
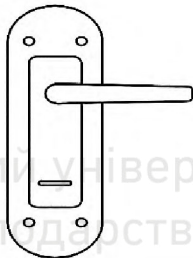
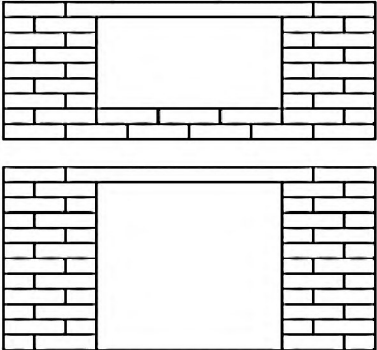
3. Exterior stud wall	c. 
4. Brick veneer	d. 
5. Brick shelf	e. 
6. CMU wall	f. 
7. Weep holes	g. 



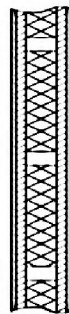
<p>8. Interior wall</p>	<p>h. </p>
<p>9. Front wall</p>	<p>i. </p>
<p>10. Blocking</p> 	<p>j. </p> <p>k. </p> <p>l. </p>



Notes

<p>1. Interior finish</p>	 <p>a.</p>
<p>2. Door and window header</p> 	 <p>b.</p>
<p>3. Door hardware</p>	 <p>c.</p>

4. Depressed floor area



d.



e.

Task 2.

You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the floor plan of the construction project. Match the words (1-16) to their transcriptions and translations (a-c). Work alone.

Components of the floor plan

1. Double window	a. [↓dʌbl ↑windəu] подвійне вікно b. [↓dəbl ↑windu] друге вікно c. [↓dʌbl ↑windu] одинарне вікно
2. Exterior door	a. [↑ək'stəriə ↓dɔ:] декорація b. [↑ik'stəriə ↓dɔ:] зовнішні двері c. [↑ik'stəri ↓dɔ:] внутрішні двері
3. Interior door	a. [↑in'təriə ↓dɔ:] інтер'єр b. [↑in'təriə ↓dɔ:] внутрішні двері c. [↑ən'təriə ↓dɔ:] зовнішні двері



4. Bifold door	a. [↑baɪfəʊld↓dɔː] подвійні двері b. [↑baɪfəʊld↓dɔː] одинарні двері c. [↑baɪfəʊld↓dɔː] другі двері
5. Casement	a. ['keɪsmənt] віконна рама b. ['keɪsmənt] створне вікно c. ['keɪzmənt] внутрішнє вікно
6. Elevation reference	a. [↓ɪlɪ'veɪʃ(ə)n↑ref(ə)r(ə)n(t)s] висота b. [↓ɔːlɪ'veɪʃ(ə)n↑ref(ə)r(ə)n(t)s] фасад c. [↓elɪ'veɪʃ(ə)n↑ref(ə)r(ə)n(t)s] вказівка на фасад
7. Sliding door	a. [↑slaɪdɪŋ↓dɔː] розсувні двері b. [↑slɪdɪŋ↓dɔː] нестійкі двері c. [↑sleɪdɪŋ↓dɔː] стійкі двері
8. Double acting single door	a. [↑dʌbl↑æktɪŋ↑saɪŋgl↓dɔː] другі двері b. [↑dʌbl↑æktɪŋ↑saɪŋgl↓dɔː] двері, які відчиняються в одну сторону c. [↑dʌbl↑æktɪŋ↑sɪŋgl↓dɔː] двері, які відчиняються в обидві сторони
9. Vented window	a. [↑vɪntd↓wɪndəʊ] вікно з виступом b. [↑ventet↓wɪndəʊ] шарнірне вікно c. [↑vented↓wɪndəʊ] вентиляційне вікно
10. Pocket door	a. [↑pɒkɪt↓dɔː] приховані розсувні двері b. [↑pɒkt↓dɔː] розсувні двері c. [↑pɒkət↓dɔː] подвійні двері
11. Fixed window	a. [↑fɪkst↓wɪndəʊ] закріплене нерухоме вікно b. [↑fɪksd↓wɪndəʊ] подвійне вікно c. [↑fɪksət↓wɪndəʊ] одинарне вікно



12. Swing	a. [swɪŋ] двері, які гойдаються b. [swən] розсувні двері c. [swaɪŋ] подвійні двері
13. Accordion	a. [ə'kɔ:diən] подвійні двері b. [ə'kɔ:diən] двері-гармошка c. [ə'kɔ:diɔ:n] одинарні двері
14. Sliding	a. ['slaidɪŋ] вікно з розсувним відкриттям стулок b. ['sləɪdɪŋ] вікно з виступом c. ['slæɪdɪŋ] вікно з виступом
15. Awning	a. [æ'niŋ] вікно з розсувним відкриттям стулок b. ['aniŋ] одинарне вікно c. ['ɔ:niŋ] вікно з підвісним відкриттям стулки
16. Hopper	a. ['hɔ:pə] вікно з відкидним відкриттям стулки b. ['hɔ:p] вікно з підвісним відкриттям стулки c. ['hæpə] вікно з розсувним відкриттям стулок
17. Bay window	a. [ʌbɪ↓windəu] шарнірне вікно b. [ʌbeɪ↓windəu] еркер c. [ʌbɔ:l↓windəu] вікно з розсувним відкриттям стулок

Building materials in the floor plan

1. Brick	a. [brɪk] цегла b. [brɪ:k] цегляна кладка c. [brɔ:k] камінь
2. Concrete	a. ['kɔŋkri:t] бетон b. ['kŋkri:t] залізобетон c. ['kɔŋkri:t] монолітний бетон



3. Stone	a. [stʊn] цегла b. [stən] бетон c. [stəʊn] камінь
4. Slate	a. [slɪt] плита b. [slert] шифер c. [slɪt] фанера
5. Wood	a. [wʊd] деревина b. [wʊ:d] фанера c. [wəʊd] плита
6. Facing tile	a. [ʌfeɪsɪˌtaɪl] облицювальний камінь b. [ʌfeɪsɪŋˌtaɪl] облицювальна плитка c. [ʌfeɪsɪˌtɪlə] керамічна плитка
7. Plywood	a. [ˈplɑɪwʊd] деревина b. [ˈplaɪwʊd] фанера c. [ˈpleɪwʊd] лісоматеріали
8. Ceramic	a. [səˈræmɪk] цегляний b. [sɪˈræmɪk] керамічний c. [kəˈrɪmɪk] бетонний
9. Structural	a. [ˈstrʌktʃ(ə)r(ə)l] конструкційний b. [ˈstrʌktʃ(ə)r(ə)l] конструктивний c. [ˈstrʌktʃ(ə)rɪl] структурний
10. Gypsum wallboard	a. [ˈdʒɪpsmˈwɔlbɔ:d] облицювальний камінь b. [ˈdʒɪpsɪmˈwɔ:lbɔ:d] керамічна плита c. [ˈdʒɪpsəmˈwɔ:lbɔ:d] гіпсова стінова плита
11. Rubble	a. [ˈrʌbl] бут, кругляк b. [ˈrəbl] фанера c. [ˈrəɪbl] деревина



12. Concrete block	a. [↓kɔŋkri:t↑tblɔk] бетонний блок b. [↓kɔŋkrət↑blɔk] залізобетонний блок c. [↓kɔŋkrit↑blɔk] попередньо напружений бетон
13. Cut stone	a. [↓kət↑stəʊn] деревина b. [↓kʌt↑stəʊn] тесаний камінь c. [↓kɔt↑stəʊn] кругляк
14. Plaster	a. [plɑ:stə(r), plæs-] штукатурка b. [pləistə(r), plæs-] цегляна кладка c. [plɔ:stə(r), plæs-] плита
15. Glass	a. [glɑ:s, glæs] скло b. [gləʊs, glæs] камінь c. [glɔ:s, glæs] плита
16. Floor tile	a. [↓flɔ↑təɪl] плита b. [↓flɔ: ↑təɪl] плитка для підлоги, пустотіла цегла для перекриття c. [↓flɔ↑təɪl] підлога

Names of rooms

1. Master bedroom	a. [↓mɑ:stə↑bedru:m] спальня господарів b. [↓mæstə↑bedru:m] майстерня c. [↓məustə↑bedrum] спальня
2. Garage	a. ['gærə(d)ʒ, gə'ra:ʒə] склад b. ['gɑ:ra:(d)ʒ, gə'ra:ʒ] комора c. ['gærɑ:(d)ʒ, gə'ra:ʒ] гараж
3. Hallway	a. ['hɔlwa:i] вітальня b. ['hɔ:lwei] коридор c. ['həlwei] спальня
4. Kitchen	a. ['kɪtʃɪn] кухня b. ['kɪtʃn] коридор c. ['kɪtʃə:n] вітальня
5. Living area	a. [↓lɪvɪŋe↑(ə)riə] вітальня b. [↓lɪvɪŋ↑ɑ:riə] коридор c. [↓lɑ:lɪvɪŋ↑e(ə)riə] спальня

6. Bath	a. [beθ] гардеробна b. [beiθ] коридор c. [bɑ:θ] ванна кімната
7. Powdery room	a. [↑paud(ə)ri↓ru:m] ванна кімната b. [↑pəd(ə)ri↓ru:m] гардеробна c. [↑pəud(ə)ri↓ru:m] коридор
8. Recreation room	a. [↑rəkrɪ'eɪʃ(ə)n↓ru:m] вітальня b. [↑ri:krɪ'eɪʃ(ə)n↓ru:m] кімната для відпочинку та ігор c. [↑rəukrɪ'eɪʃ(ə)n↓ru:m] спальня
9. Laundry	a. ['lɔ:ndri] пральня b. ['laundri] гардеробна c. ['lɔ:ndrei] ванна кімната
10. Study	a. [stʌdi] робочий кабінет b. [stɑ:di] коридор c. [stɔ:di] гардеробна
11. Closet	a. ['kla:zit] робочий кабінет b. ['klɔ:sit] коридор c. ['klɔ:zit] гардеробна, убиральня
12. Storage	a. ['stɔ:riɔʒ] комора b. ['stəriɔʒ] коридор c. ['stɑ:riɔʒ] робочий кабінет
13. Mud room	a. [↑mɑ:d↓ru(:)m] вітальня b. [↑məd↓ru(:)m] дитяча кімната c. [↑mʌd↓ru(:)m] передпокій
14. Porch	a. [pɔ:tʃ] веранда b. [pətʃ] комора c. [pɑ:tʃ] гардеробна
15. Patio	a. ['pætiəu] балкон b. ['pætiəu] внутрішній двір c. ['pætə] веранда



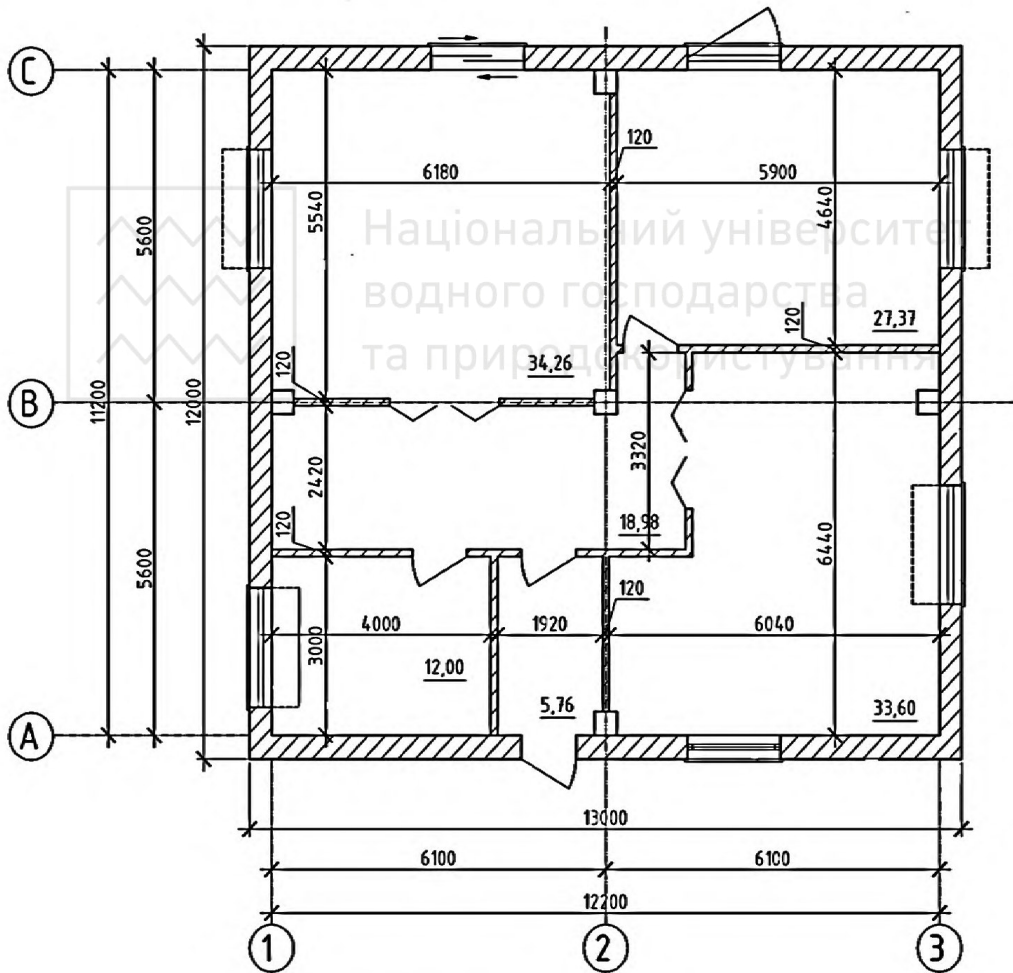
Task 3.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Match words (1-3) with words (a-m) on the right to form phrases for the floor plan A below. Be attentive! There are two extra word combinations which are not suitable to the floor plan. See supplement 2. Work alone.

Example for you: 2a- bifold door

1. Window 2. Door 3. Tile

a. bifold; b. awning; c. hopper; d. facing; e. single; f. pivoted; g. pocket;
h. double; j. exterior; k. interior; l. casement; m. bay.



Floor plan A



Task 4.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Choose the most appropriate word combinations for the floor plan. Work alone, then in pairs.

- a. Rooms -door - windows-elevation indication-wall schedule-notes
- b. Door-rooms - windows-elevation indication-wall schedule-notes-design load schedule
- c. Windows-door – rooms-elevation indication-wall schedule-notes-design load schedule

Task 5.

You want to become a trainee in an international construction company. You have to test your language proficiency. Choose the most appropriate rules for the sentences below from the construction project. Work in groups of 3-4 students.

Example: Written dimensions shall govern – **rule 1.**

1. Contractor shall furnish shop drawings.
2. All exterior walls to use gypsum board inside.
3. All door hardware to be selected by owner.
4. Provide minimum air space between sheathing and brick veneer.
5. Replace existing windows.
6. Provide solid wood blocking.
7. All interior construction shall comply with code.
8. Refer for equipment plans.

Remember!

Rule 1. Constructions with the modal verb shall are synonymous with constructions with have to and mean necessity of doing smth. Contractor shall check, verify and maintain all dimensions= Contractor has to check, verify and maintain all dimensions

Rule 2. Do not scale drawings – imperative sentence means order.

Rule 3. All exterior walls to use brick – infinitive sentence is used to talk about habitual actions. Infinitive sentence=present simple. All exterior walls to use brick= All exterior walls use brick

Rule 4. Siding colour to be selected by owner – infinitive passive=present simple passive voice means habitual actions in passive voice which are done by the subject.



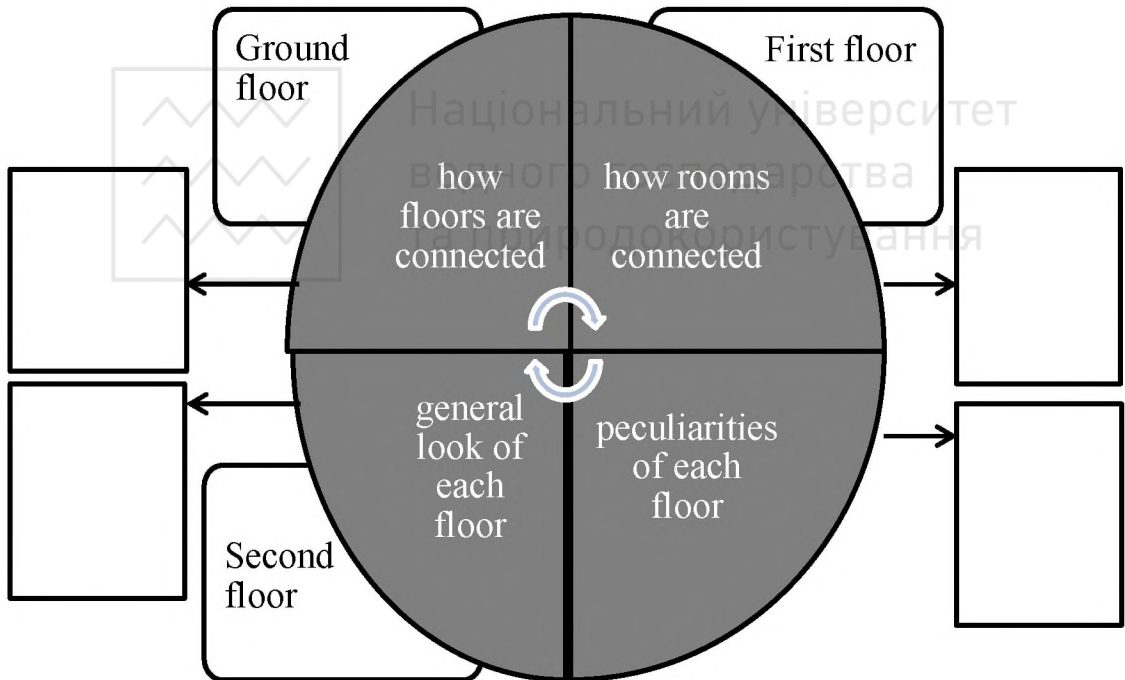
Task 6.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The floor plan”. Listen to the lecturer and put + for the words related to the topic “The floor plan.” Work alone.

Sliding door, bifold door, single door, vented window, design load schedule, plot plan.

Task 7.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The floor plan”. Listen to the words for the topic “The floor plan”. Fill in the following diagram. Work alone.



Task 8.

Student A – a civil engineer. Student B – a trainee. Student A draws symbols for the floor plan. Student B names it. Work in pairs.



There is an example for you. Student A.
B. double windows.

Student

Task 9.

You want to become a trainee in an international construction company. You have to repeat the words from notes to the floor plan with the ending - s. Find words in plural and word combinations with noun and adjective, noun and noun from notes to the floor plan. Translate them. Work in groups of 3-4 students.

Wall schedule	
Description	Remarks
Exterior stud wall	Siding color as selected by owner
Exterior stud wall / Brick veneer	Provide min. air space between sheathing and brick veneer
Interior wall Typ. with gypsum wall board	
Add batt insulation	
Interior wall Typ. with gypsum wallboard	
Stud spacing	
CMU wall	Use CMU wall below grade Provide brick shelf at front wall.
Note: All exterior walls to use gypsum board inside.	Note: All interior walls shall be wall type C.

Task 10.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. Find sentences with the modal verb shall and infinitive in active and passive voice and choose the correct meanings for them. Work alone.

Example for you: All interior walls shall be wall type B. – sentence with the modal verb shall and infinitive in active voice. b. Information about wall characteristics.

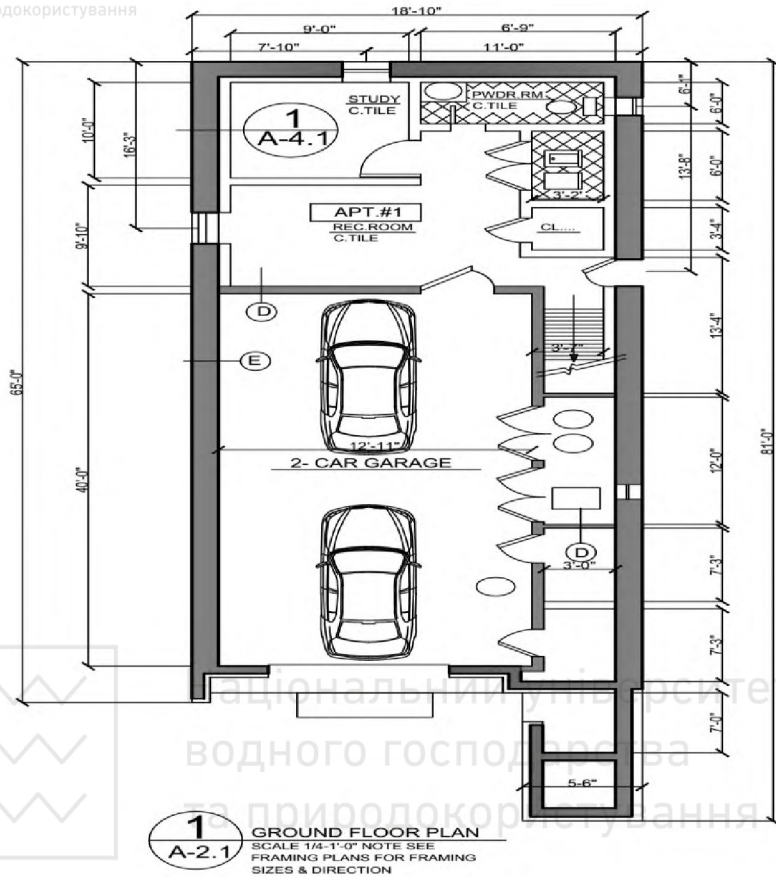


1. Use CMU wall. a. Information about wall type. b. Information about building material for the wall.
2. All interior finishes shall be selected by owner. a. Information about owner's interior design. b. Information about types of interior walls.
3. All interior walls shall be wall type B. a. Information about wall characteristics. b. Information about building material for the wall.
4. Provide brick veneer. a. Information about building material for the residence. b. Information about the type of exterior wall.

Task 11.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. Choose the sentence which is appropriate for the ground floor plan A below. Work in pairs.

1. There is a bifold door into the bedroom.
2. There is a sliding door into the kitchen.
3. There is a double door in the bathroom.
4. There is a vented window in all bedrooms.
5. There is a landscaped area near the house.



Ground floor plan A

Task 12.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. You have to show your understanding of the notes' content. Choose synonymous meanings of grammar structures. Work alone.

<p>1. All exterior walls to use gypsum board inside.</p>	<p>a. All exterior walls have to use gypsum board inside. b. All exterior walls should use gypsum board inside. c. All exterior walls can't use gypsum board inside</p>
<p>2. All interior walls shall be wall type C.</p>	<p>a. All interior walls will be wall type C in the future. b. All interior walls have to be wall type. c. All walls could be type C</p>



Task 13.

You want to become a trainee in an international construction company. You have to show your understanding of the notes' content. You are shown notes with the incorrect word order. Make the right word order in the sentences below. Work alone.

1. Filler door all and window headers shall plywood be.
2. Inside all to exterior walls board use gypsum wall.
3. Veneer brick min. air space between sheathing and provide.

Task 14.

You want to become a trainee in an international construction company. You have to show your understanding of the notes' content. Assess the content of the sentences with their images. Match the content of the sentences (1-3) for notes 1 and 2 with the correct images (a-f). There are three odd ones. Work alone.

- a. image 1; b. image 2; c. image 3.; d. image 4; e. image 5; f. image 6; g. image 7; h. image 8; i. image 9.

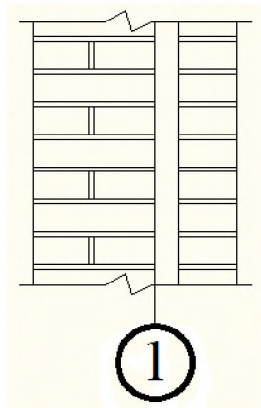


Notes1

1. 1.1. Provide min. air space between sheathing and brick veneer
- 1.2. All interior walls shall be wall type C
- 1.3. Provide brick shelf at front wall

Notes 2

2. 2.1. Provide in wall blocking at all millwork.
- 2.2. Fill in depressed floor areas with concrete floor fill.
- 2.3. Wrap around all arch, fire rated wall with gypsum board.

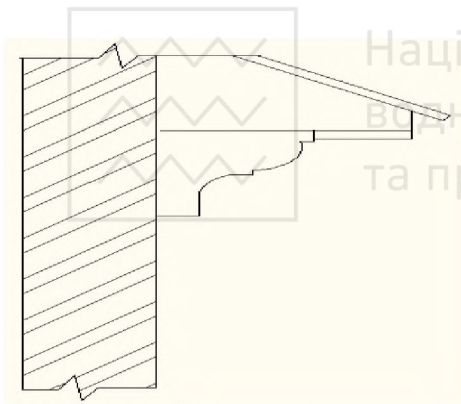


a. image 1

Notes 1

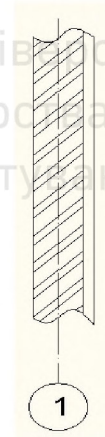
1. 1.1. Provide min. air space between sheathing and brick veneer

Images for notes

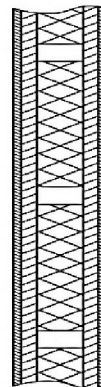
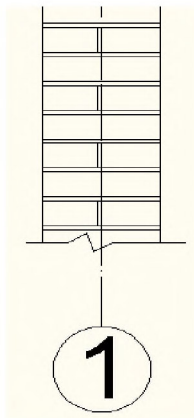


b. image 2

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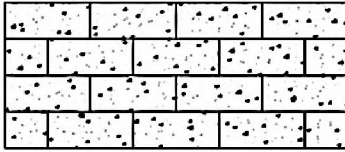


c. image 3

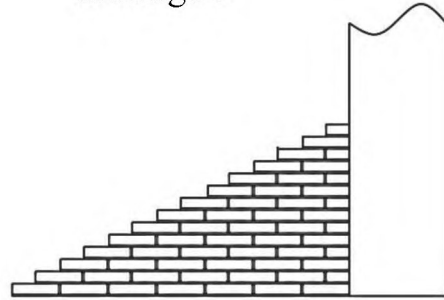




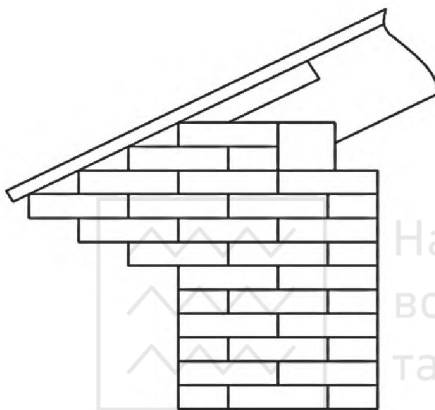
d. image 4



e. image 5



f. image 6



g. image 7



h. image 8

i. image 9

Task 15.

You want to become a trainee in an international construction company. Your language proficiency has to be checked. Find the words from the list below on the floor plans from supplement 1. Show them on the layout. Work in pairs.

Double window, casement, bifold door, CMU wall, single window, single door, rubble, gypsum wallboard. (See first floor plan of two family residence)

Supplementary exercises for speaking



Task 1.

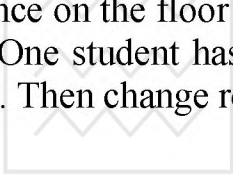
You want to become a trainee in an international construction company. You have to repeat typical word combinations. Choose the most appropriate word combinations for the floor plan of the house 1 to say what there is/there is no on the following floor plan . Work in pairs.

Example for you. There is a door. There is no design load schedule.

- Rooms -door - windows-elevation indication-wall schedule-notes
- Door-rooms - windows-elevation indication-wall schedule-notes-design load schedule
- Windows-door – rooms-elevation indication-wall schedule-notes-design load schedule

Task 2.

You want to become trainees in an international construction company. You are given the probation task in order to check your knowledge of floor plan symbols. Describe what is around the family residence on the floor plan using the following substitution table. Work in pairs. One student has to draw symbols, another describes the floor plan with it. Then change roles.



There is an example for you. Student A.

Student B.

There are double windows.

1. There are.....	in rooms
2. There are.....	in the hallway
3. There are such building materials as.....	on the floor plan

Task 3.

You want to become trainees in an international construction company. Discuss the floor plan for family residence in accordance with owner's demands: elements of luxury (huge garage, two powdery rooms), many windows, only environmentally friendly materials, huge kitchen, single doors in the kitchen. Read the sample dialogue and make the similar one. Use the phrases for agreement and disagreement, clarification of information with a partner and the expression of opinion. Work in pairs.



C1 In my opinion the floor plan suit the demands of the owner because the cottage has many windows as the owner wants

C2 I hold the same opinion.

T1 What do you think about the usage of environmentally friendly materials?

C2 As you see there are such building materials as hardwood, ceramic, gypsum. They are environmentally friendly. Therefore this floor plan doesn't correspond to owner's demands. But some more environmentally friendly have to be added.

C1 There is enough space for children.

C2 I take a different view. There is huge garage for two cars but two powdery rooms.

Could you be more specific?

C2 There are too many single doors in the rooms. But there are no single rooms in the kitchen. Therefore this floor plan doesn't correspond to owner's demands.

C1 As for another demand, to my mind kitchen is better without single doors.

C2 I have to side with you on this one.

Task 4.

You want to become trainees in an international construction company. Choose possible planning and construction concepts (A, B, C, D) for the floor plan of two family residence. Explain how you have arrived to such answer. Use the following phrases for expressing opinion. Work in pairs.

Phrases for expressing opinion

To be perfectly frank

Without a shadow of a doubt,.....

I really don't think..... or I really do think.....

I'm positive that.....

Quite the opposite...

I definitely agree/disagree...

I'm no expert on this, but.....

<p>the planning concept A (such part of planning/constructive concept as...)</p>	<p>doesn't correspond suit, fit / corresponds, suits/fits to such planning and constructive as...</p>	<p>because...</p>
--	---	-------------------

a. Planning concept 1

Ground floor

The location of rooms should be changed. Additional rooms should be added. Double doors should be changed into single ones.

b. Constructive concept 1

Ground floor

Internal walls have to be changed in gypsum walls. Floor tile can be changed in parquet.

a. Planning concept 2

First floor

One bathroom should be taken away. Two bedrooms should be combined into one. More space-saving construction of staircase should be made.

b. Constructive concept 2

First floor

Exterior wooden walls in a wall veneered with natural material should be changed in stone and artificial brick or siding with insulating material and gypsum. For this purpose the first floor plan should be changed into the plan of framed type.

Task 5.

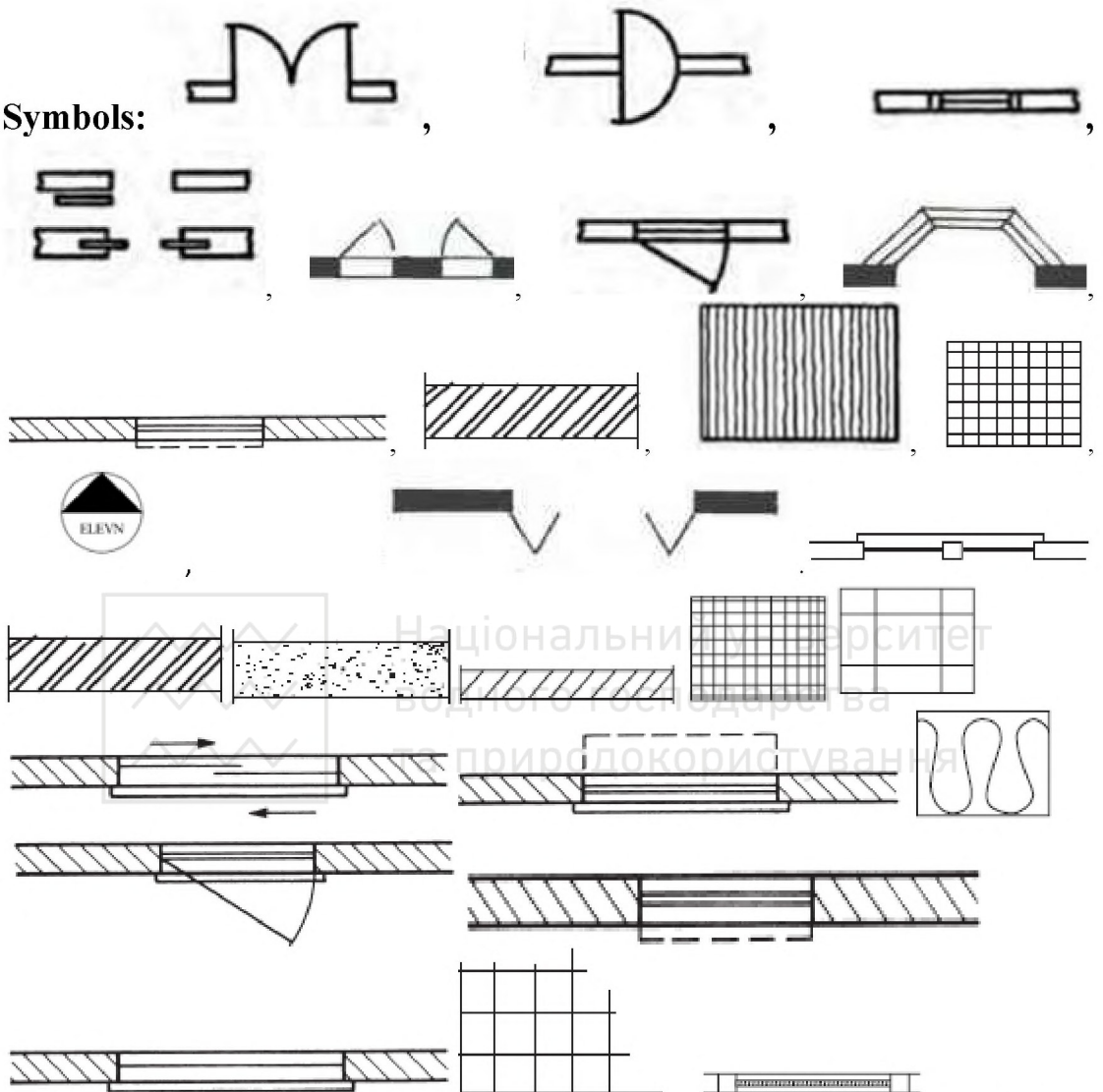
You want to become trainees in an international construction company. Discuss the floor plans of the construction project “Two family residence” and possible engineering concepts for it. Work in pairs.

Task 6.

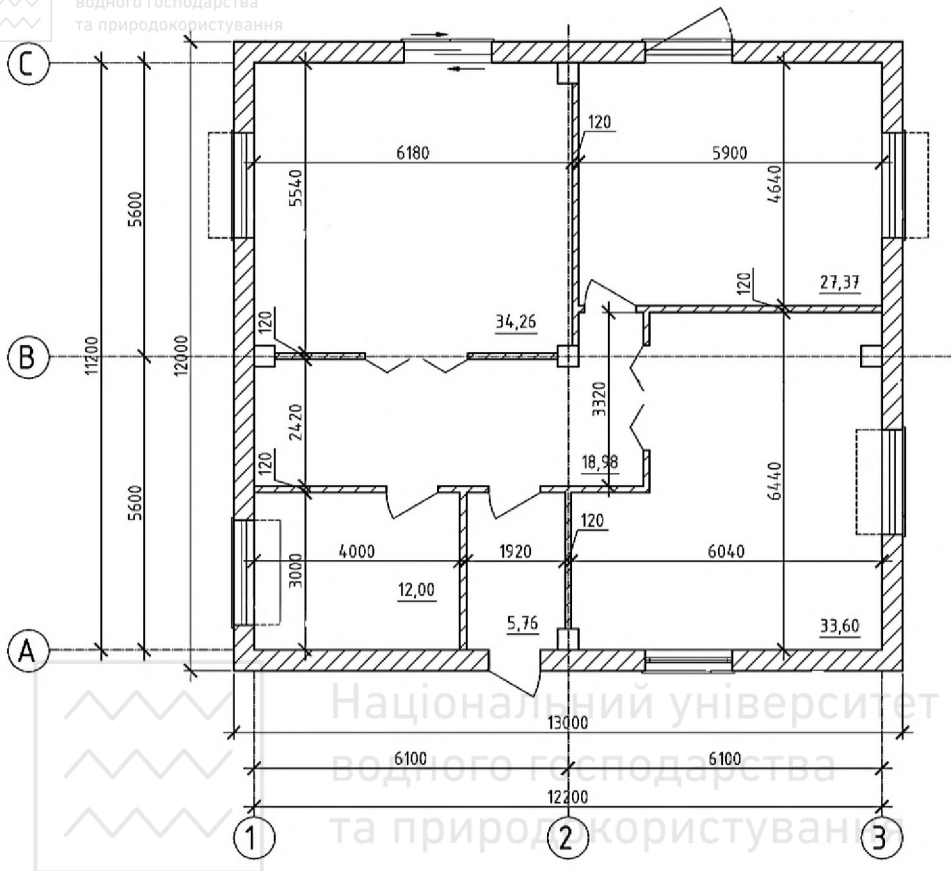
You want to become trainees in an international construction company. You are given the list of symbols-components for a floor plan. Say if they are shown on the floor plan A and B. Work in pairs.



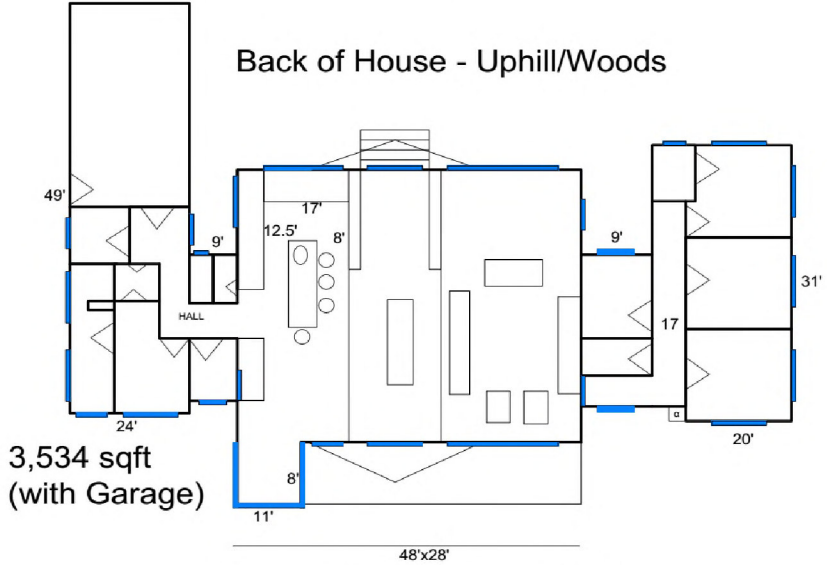
Symbols:



Example for you: There are double windows on the floor plan A and B



Floor plan A



Floor plan B



Task 7.

You want to become a trainee in an international construction company. Explain the engineering concepts for the floor plan. Make use of the substitution table. Work alone.

There are the following owner's demands:

elements of luxury (huge garage, two powdery rooms), many windows, only environmentally friendly materials, huge kitchen, single doors in the kitchen.

The floor plan	doesn't correspond/ corresponds to such owner's demand as...	because...
Concrete	isbuilding material
Therefore walls in the building	aren't made of building materials
Kitchen	is	neither small nor huge
That's why	it doesn't correspond to such owner's demand as...	
There are	windows in the house
There are		such building materials as
Therefore		



Task 8.

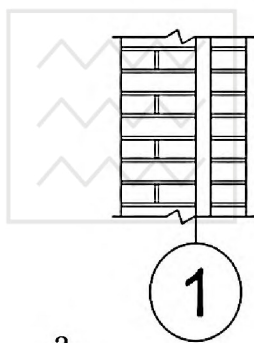
You want to become a trainee in an international construction company. Your understanding of the construction project is going to be checked. Make up the presentation of the layouts and engineering concepts for them. See Supplement 4.

Progress check

After the unit “**FLOOR PLAN**” test your professional and linguistic competence. Mark the correct variant.

1. Which of the drawings does this sentence correspond to?

Provide minimum air space between sheathing and brick veneer.



a.



b.

2. 1. Which of the following words only belong to the topic “Floor plan”?

a. Double door, bifold door, single door, vented window, elevation indication, zoning chart, landscaped area, fixed window.

b. CMU wall, interior door, exterior door, wall schedule, casement window, pocket door, brick.

2. 2. Which of the following words belong to the wall schedule?

a. Top chord live, lot area, address, floor area, lot width, front yard.

b. Brick shelf, interior wall, exterior wall, brick veneer, sheathing, siding color, front wall.

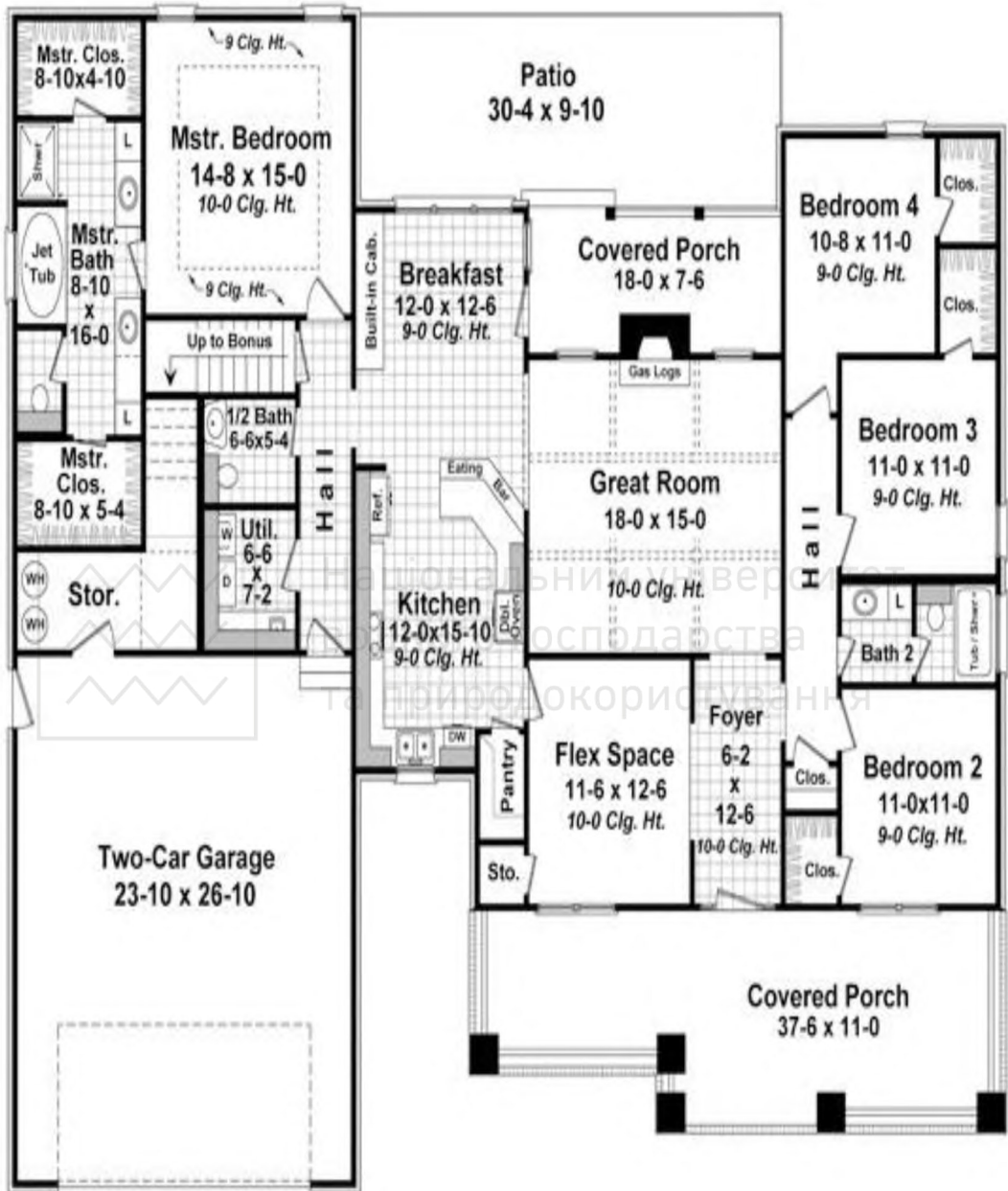
2.3. Which of the following words belong to notes?

a. Hardware, door header, window header, interior finish.

b. Ditch, footing, landscaped area.

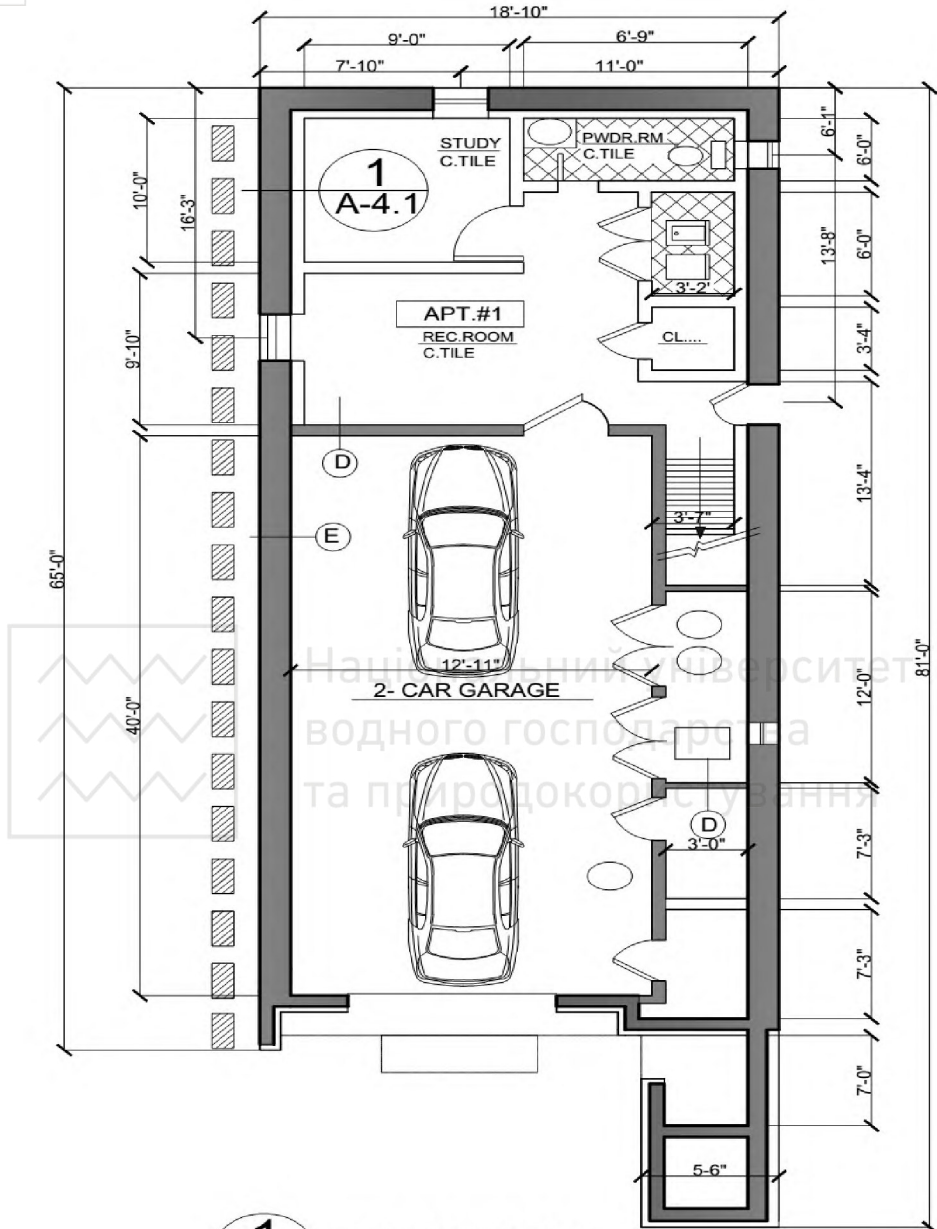


3. Which of the following layouts with notes has correct grammar structure?



a.

Structural drawings will be seen for additional dimensional information.
You provided wood blocking at all millwork.



1
A-2.1
GROUND FLOOR PLAN
SCALE 1/4"-1'-0" NOTE SEE
FRAMING PLANS FOR FRAMING
SIZES & DIRECTION

b.

All interior finishes shall be selected by owner.

All door and window headers shall be plywood filler.

All door hardware to be selected by owner.



After the unit “**FLOOR PLAN**” fill in the following table about what you have known before and what you have learnt. There is an example of how to do it.

What I have known before	What I have learnt
the word construction project	detailed information about items in general characteristic s of construction project, how to make assumptions about layouts on the basis of general characteristics of the construction project

After the unit “**FLOOR PLAN**” fill in the following table about what you know and what you can. Estimate your progress and write your opinion about how to improve your progress if you do not have good results and how to continue your progress if you have good ones. There is an example of how to do it.

I know detailed information about a floor plan.	Well	Badly
	How to continue progress to search for more information about it on the internet, look through the suggested floor plans and compare it with new ones.	How to improve knowledge to repeat the learnt words for several times, to watch proposed youtube videos, to fulfill tasks for the second time individually without prompts.
I can make assumptions about the layouts.	How to continue progress.	How to improve ability.



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UNIT 4. ELEVATION





Lead in. Answer the following questions at home. Be ready to discuss them in group.

What is the elevation? Which synonyms for elevation do you know?

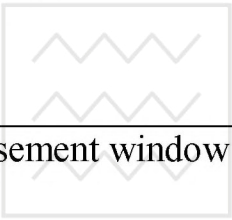
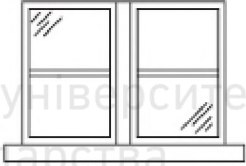
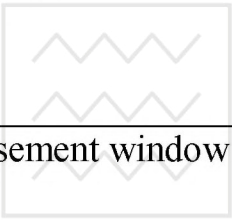

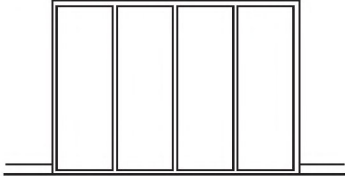
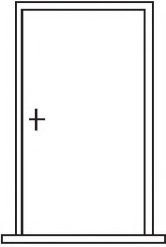
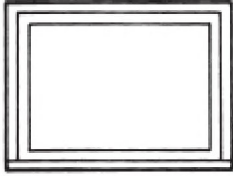
What is the correct image of the elevation ?

What are its main components? What can be seen on it? Which tables of general characteristics is it connected with?

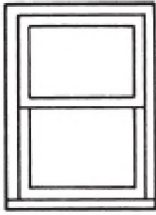

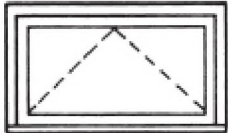

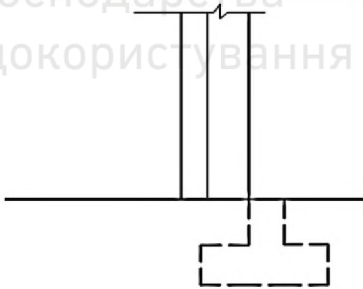
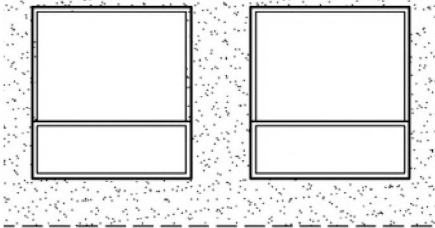
Task 1.

You want to become a trainee at international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the components of an elevation. Match the words with their symbols. Work alone.

Elevation

1. Sliding 	a. 
2. Casement window 	b. 
3. Exterior door	c. 
4. Bifold door	d. 
5. Double hung window	e. 

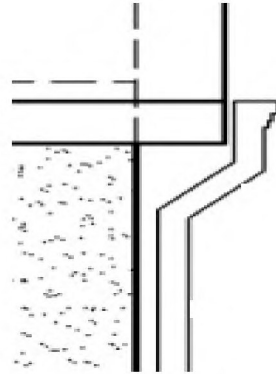


6. Hopper	f. 
7. Jalousie	g. 
8. Fixed	h. 
9. Awning	i. 
10. Gutter	j. 
11. Finish grade	k. 



12. Guardrail

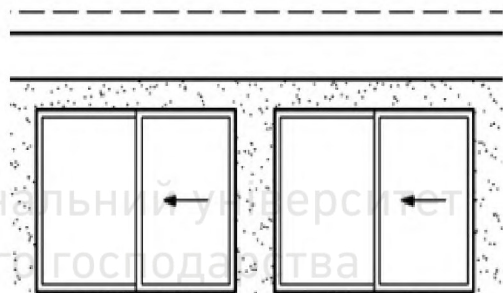
1.



13. Floor line

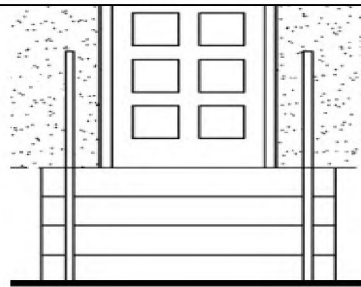


m.



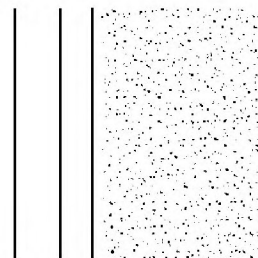
14. Ceiling line

n.



15. Property line

o.





Task 2.

You want to become a trainee in an international construction company. First of all you have to repeat the meanings of words of the construction project. Listen to the information about the elevation of the construction project. Match the words (1-10) to their transcriptions and translations (a-c). Work alone.

Components of elevation

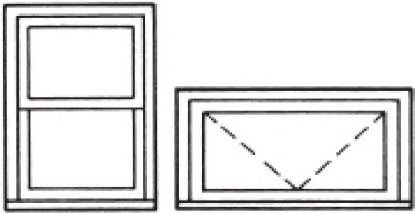
1. Flashing	a. ['flæʃɪŋ] гідроізоляція, фартук (елемент покрівлі) b. ['flʌʃɪŋ] вогнище c. ['flæəʃɪŋ] миготіння
2. Guardrail	a. ['gə:dreɪl] поручень b. ['gædreɪl] рейси c. ['gɑ:dreɪl] брус
3. Fascia	a. ['feɪʃə] дошка b. ['fæʃiə] пояс, плаский елемент, який створює на фасаді стрічку c. ['fɑ:ʃiə] таблиця
4. Ceiling line	a. [↑si:lɪŋ↓laɪn] лінія стелі b. [↑silɪŋ↓ləɪn] лінія підлоги c. [↑siəlɪŋ↓laɪn] лінія будівлі
5. Floor line	a. [↑flɔ:↓ləɪn] лінія будівлі b. [↑flæə↓laɪn] лінія стелі c. [↑flɔ:↓laɪn] лінія підлоги
6. Finish grade	a. [↑fɪnɪʃ↓greɪd] рівень землі після закінчення робіт по благоустрою території b. [↑fɪnɪʃ↓grɑ:ɪd] завершальна стадія c. [↑fɪnɪʃ↓grɪd] остання лінія
7. Gutter	a. ['getə] жолоб b. ['gʌtə] лінія c. ['gɑ:tə] дошка

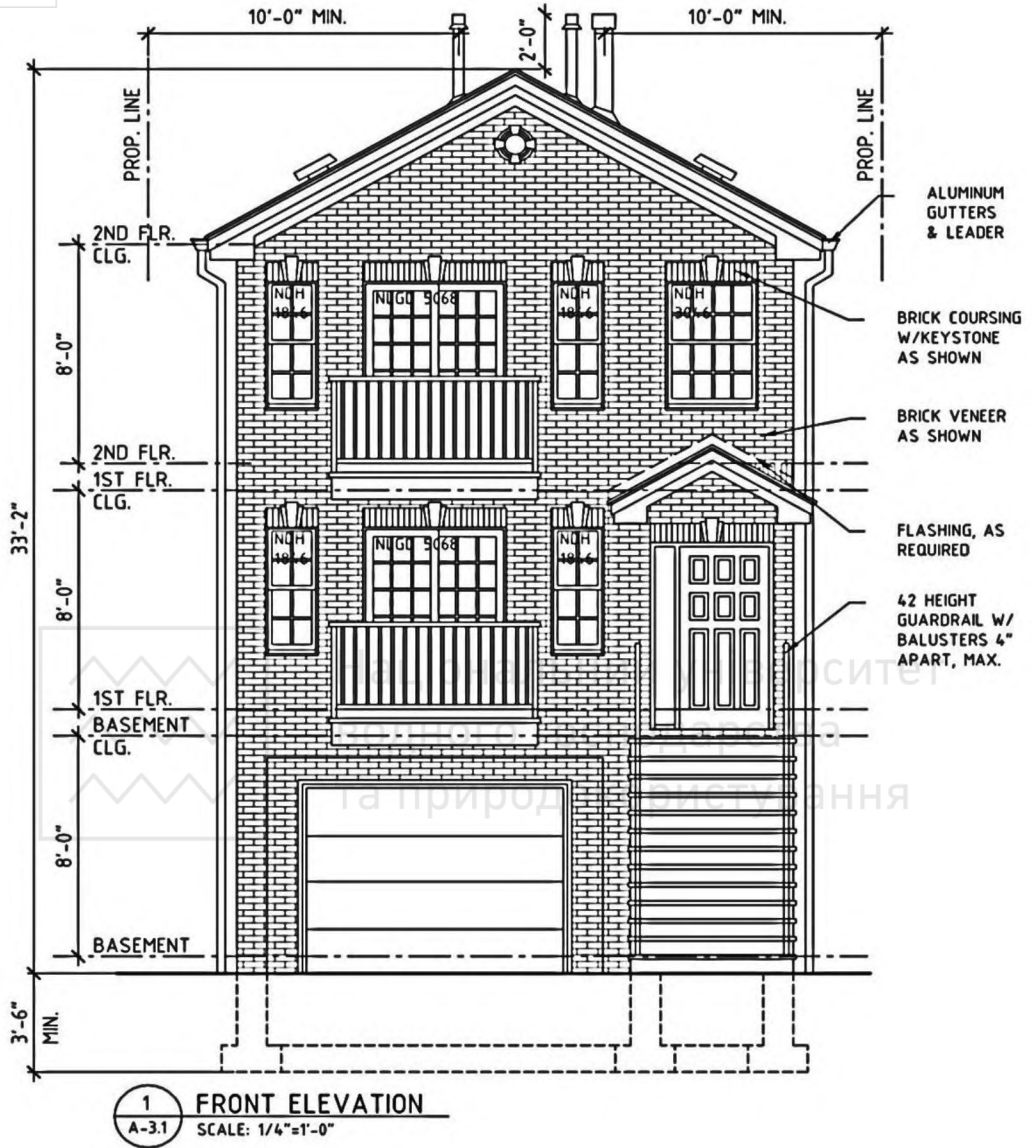


8. Coursing	a. ['kʌsɪŋ] балка b. ['kæsɪŋ] дошка c. ['kɔ:sɪŋ] ряд кладки
9. Veneer	a. [vi'niə] лінія b. [və'niə] одношарова фанера, кладка c. [vei'niə] брус
10. Basement	a. ['beɪsmənt] цокольний поверх b. ['beɪzmənt] поверх c. ['bæsmnt] висота

Task 3.

You want to become a trainee in an international construction company. Your language proficiency is to be checked. You have to repeat typical word combinations. Match a word in the left-hand column with a word on the right to form phrases and to say which are appropriate ones for the front elevation A below. See supplement 2. Work alone.

1. Brick	a. gutter
2. Finish	b. veneer
3. Floor	c. coursing
4. Ceiling	d. grade
5. Property	e. line
6. Aluminium	f. window
7. Double hung	g. door
8. Casement	
9. Awning 10. Fixed 11. Bifold 12. Swing 13. Accordion 14. Sliding 15. Hopper 16. Jalousie	



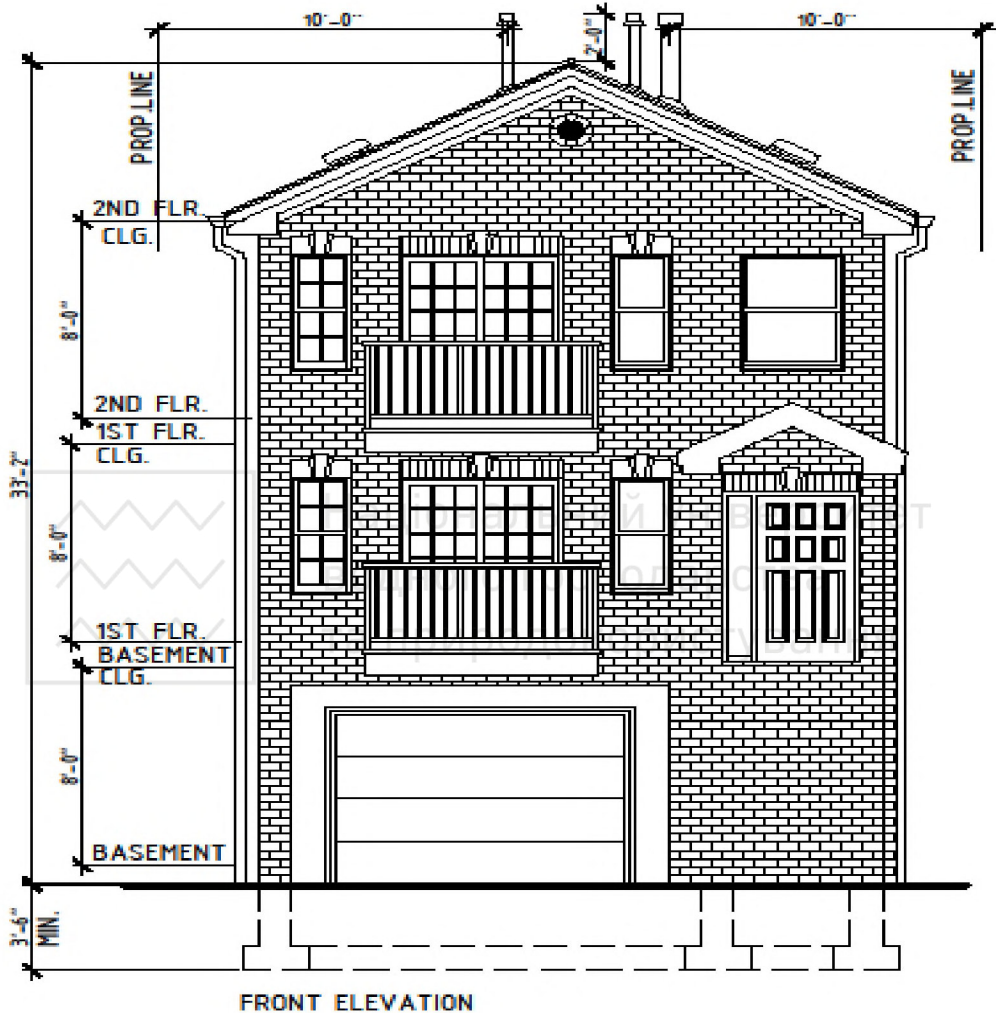
Front elevation A

Task 4.

You want to become a trainee in an international construction company. You have to repeat typical word combinations. Choose the most appropriate word combinations for the elevation of the house 1. Work alone, then in pairs.



- Floor line-flashing-fascia-gutter-coursing
 - Shape of the elevation-particular items-overall dimensions
 - Overall dimensions-shape of elevation-doors-driveway-house
- See the elevation of house 1.



Elevation of the house 1

Task 5.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The elevation”. Circle the odd word out which does not fit the topic “The elevation”. Work in pairs.

Property line, finish grade, floor line, flashing, fascia, brick coursing, guardrail, brick veneer.



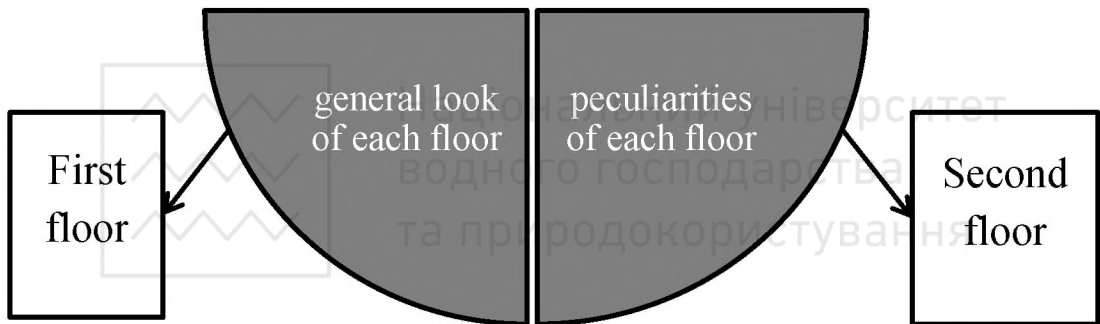
Task 6.

You want to become a trainee in an international construction company. You have to repeat the words for the topic “The elevation”. Listen to the lecturer and put + for the words related to the topic “The elevation.” Work alone.

Vented window, design load schedule, fascia, finish grade, casement window, exterior door, property line, wall schedule, brick coursing, guardrail, gypsum wall board.

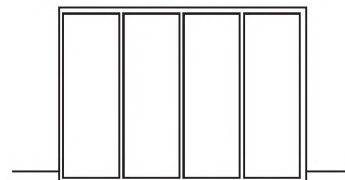
Task 7.

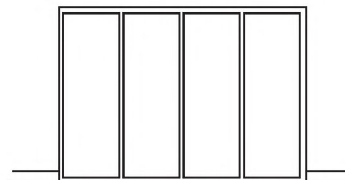
You want to become a trainee in an international construction company. You have to repeat the words for the topic “The elevation”. Listen to the words for the topic “The elevation”. Fill in the following diagram. Work alone.



Task 8.

Student A – a civil engineer. Student B – a trainee. Student A draws symbols for the elevation. Student B names the symbols. Work in pairs.



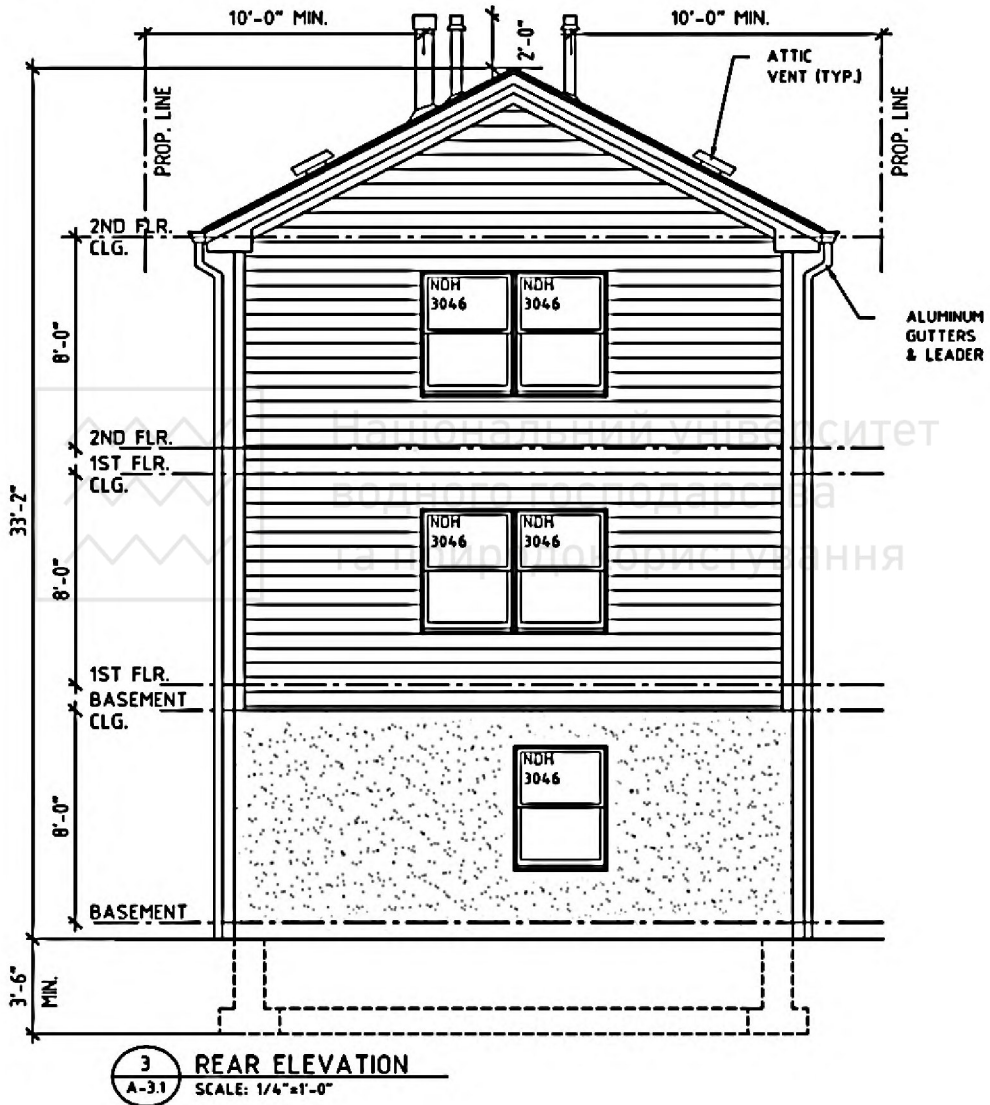
There is an example for you. Student A.  Student B. exterior door.



Task 9.

You want to become a trainee in an international construction company. Find the words on the elevation A from the list below. Show them on the layout. Work in pairs.

Slider, gutter, guardrail, exterior door, floor line, ceiling line, fascia, finish grade, basement.



Elevation A



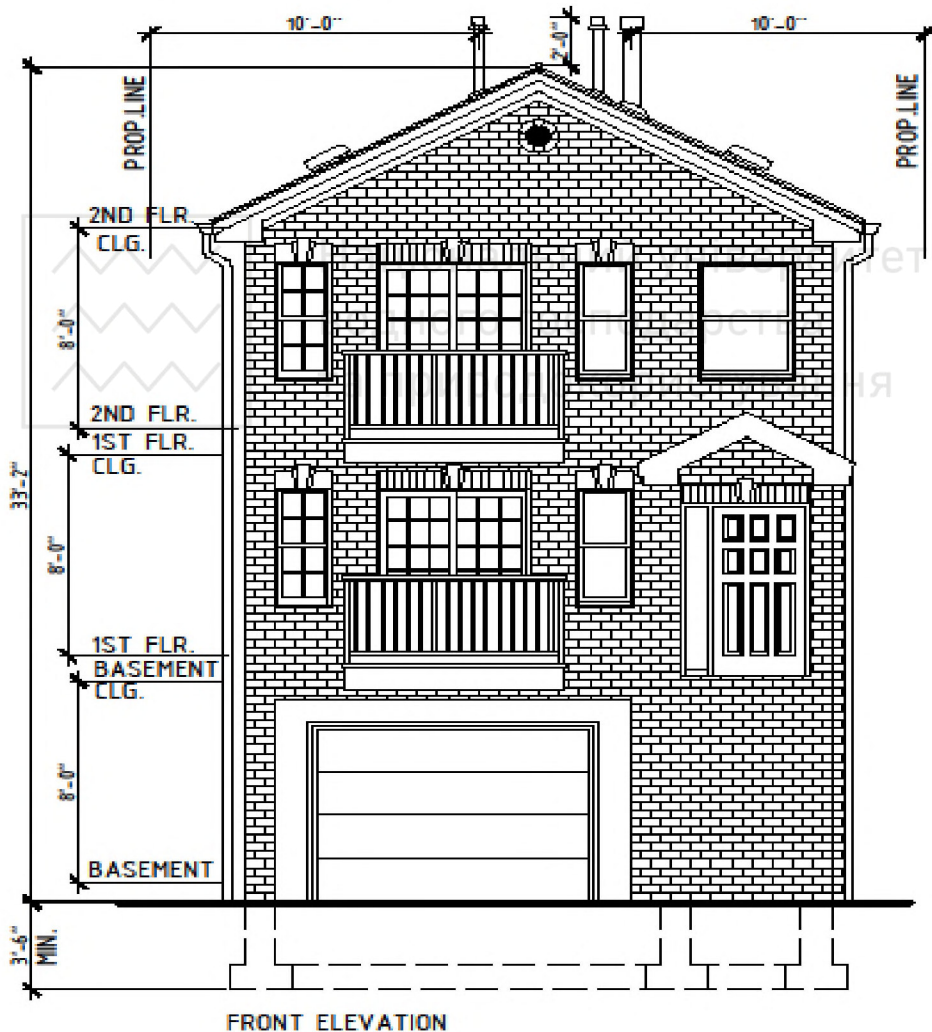
Supplementary exercises for speaking

Task 1.

You want to become trainees in an international construction company. Choose the typical orders of descriptions of the elevation to say what there is/there is no on the following elevation of the house 1. Work in pairs.

- Floor line-flashing-fascia-gutter-coursing
- Shape of the elevation-particular items-overall dimensions
- Overall dimensions-shape of elevation-doors-driveway-house

See the elevation of house 1.

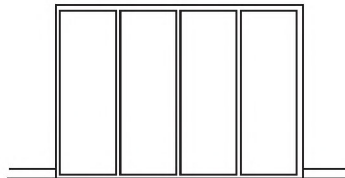



Elevation of the house 1



Task 2.

You want to become trainees in an international construction company. You are given the probation task in order to check your knowledge of elevation symbols. Describe what is on the elevations from Supplement 1 using the following substitution table. Work in pairs. One student has to draw symbols, another describes the plot plan with it. Then change roles.



Example for you: student A.  student B. There is an exterior door.

1. There are.....	above windows in front/rear elevation
2. There are.....	near guardrail in front/rear elevation
3. There is.....	on the basement in front/rear elevation

Task 3.

You want to become trainees in an international construction company. Discuss the elevation for two family residence in accordance with owner's demands: veneer from not environmentally friendly and cheap building material, brick coursing above the window. Use the phrases for agreement and disagreement, clarification of information with a partner and the expression of opinion. Work in pairs.

Task 4.

You want to become trainees in an international construction company. Choose possible planning and construction concepts (1 and 2) for the elevation of two family residence in accordance with demands of two families. Explain how you have arrived to such answer. Use the following phrases for expressing opinion. Work in pairs.

Family 1. I like special cottages. I want the residence where there is no front door but the entrance is through an enormously grand porch on one end of the house, which faces a private lane.



I want veneer with environmentally friendly building material and special veneer around the door.

Family 2. I love cottage, cabin, homey type of looks. I'd like suggestions on anything that might make my home a little more inviting from the street.

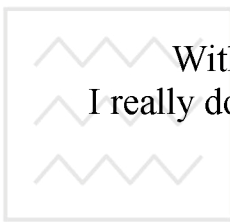
Constructive concept 1. I propose to veneer the house with brick and rubble around the door.

Constructive concept 2. The best variant is to veneer with wooden panel and with cut stone around the door.

Planning concept 1. There is a need to make the special staircase and change types of windows from fixed into awning or casement.

Planning concept 2. Windows have to be left without changes. They look very aesthetically but there should be cut stone or rubble veneer around doors.

Phrases for expressing opinion



To be perfectly frank

Without a shadow of a doubt,.....

I really don't think..... or I really do think.....

I'm positive that.....

Quite the opposite...

I definitely agree/disagree...

I'm no expert on this, but.....

<p>the planning concept A (such part of planning/constructive concept as....)</p>	<p>doesn't correspond suit, fit / corresponds, suits/fits to such family demand as</p>	<p>because...</p>
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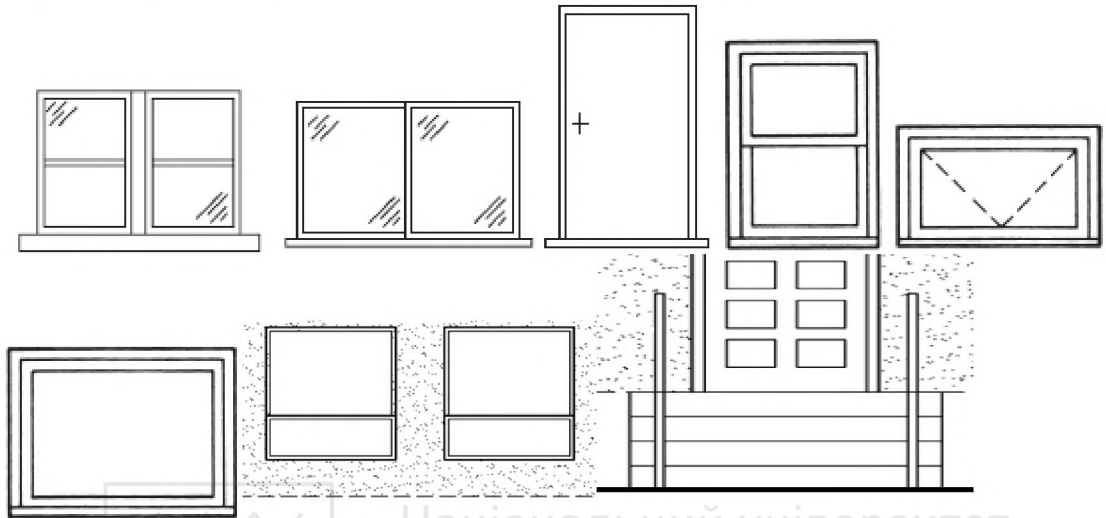
Task 5.

You want to become trainees in an international construction company. Discuss the content of the construction project “Two family residence” and possible engineering concepts for it.



Task 6.

You want to become trainees in an international construction company. You are given the list of symbols-components for elevation. Say if they are shown on the elevation. Work in pairs.



There are exterior doors and guardrail on elevation.

Task 7.

You want to become a trainee in an international construction company. Describe the elevation of the construction project chosen by from the foreign construction company. Make use of the substitution table. Work in pairs

1. There are.....	on front elevation
2. There are.....	on rear elevation
3. There are such building materials as.....	on front and rear elevation

Task 8.

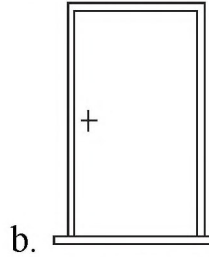
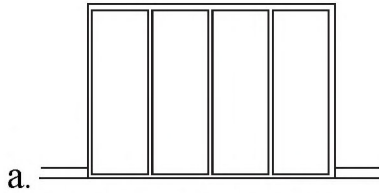
You want to become a trainee in an international construction company. Your understanding of the construction project is going to be checked. Make up the presentation of the elevation and engineering concepts for it. See supplement 4.



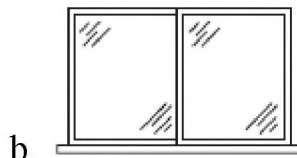
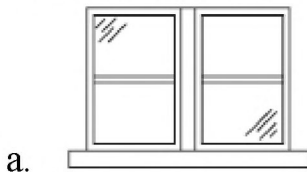
Progress check

After the unit “ELEVATION” test your professional and linguistic competence. Mark the correct variant.

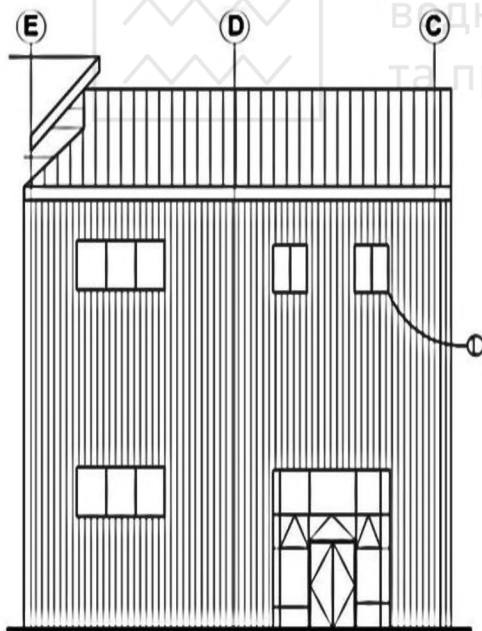
1. 1. Which of the following symbols means bifold door?



1.2. Which of the following symbols means slider window?

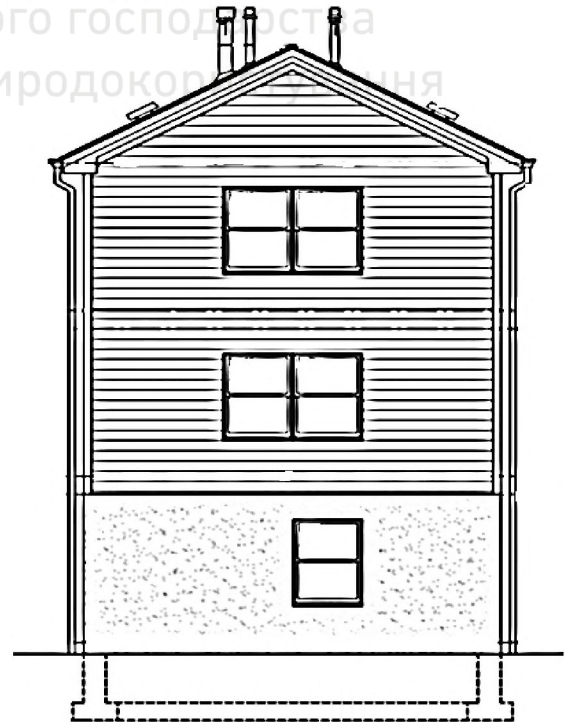


2. 1. On which drawings guardrail is not shown?



(A) NORTH ELEVATION

a.



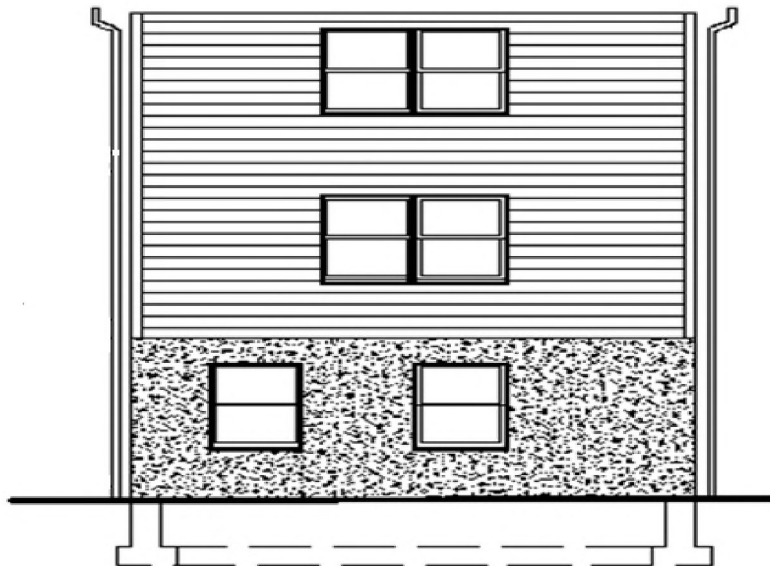
b.



2. 2. Which of the following elevations has no property line and has the wrong structure?



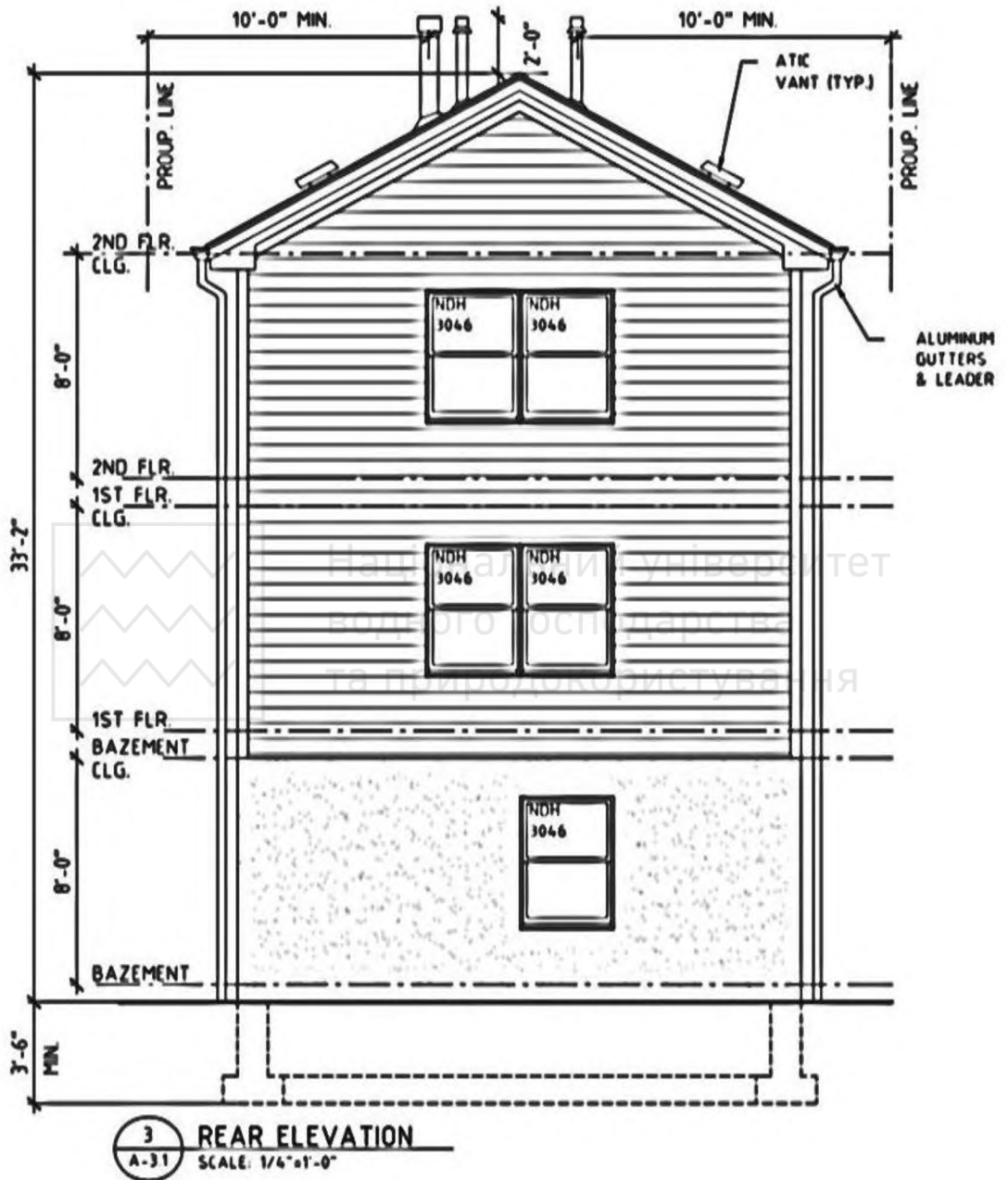
a.



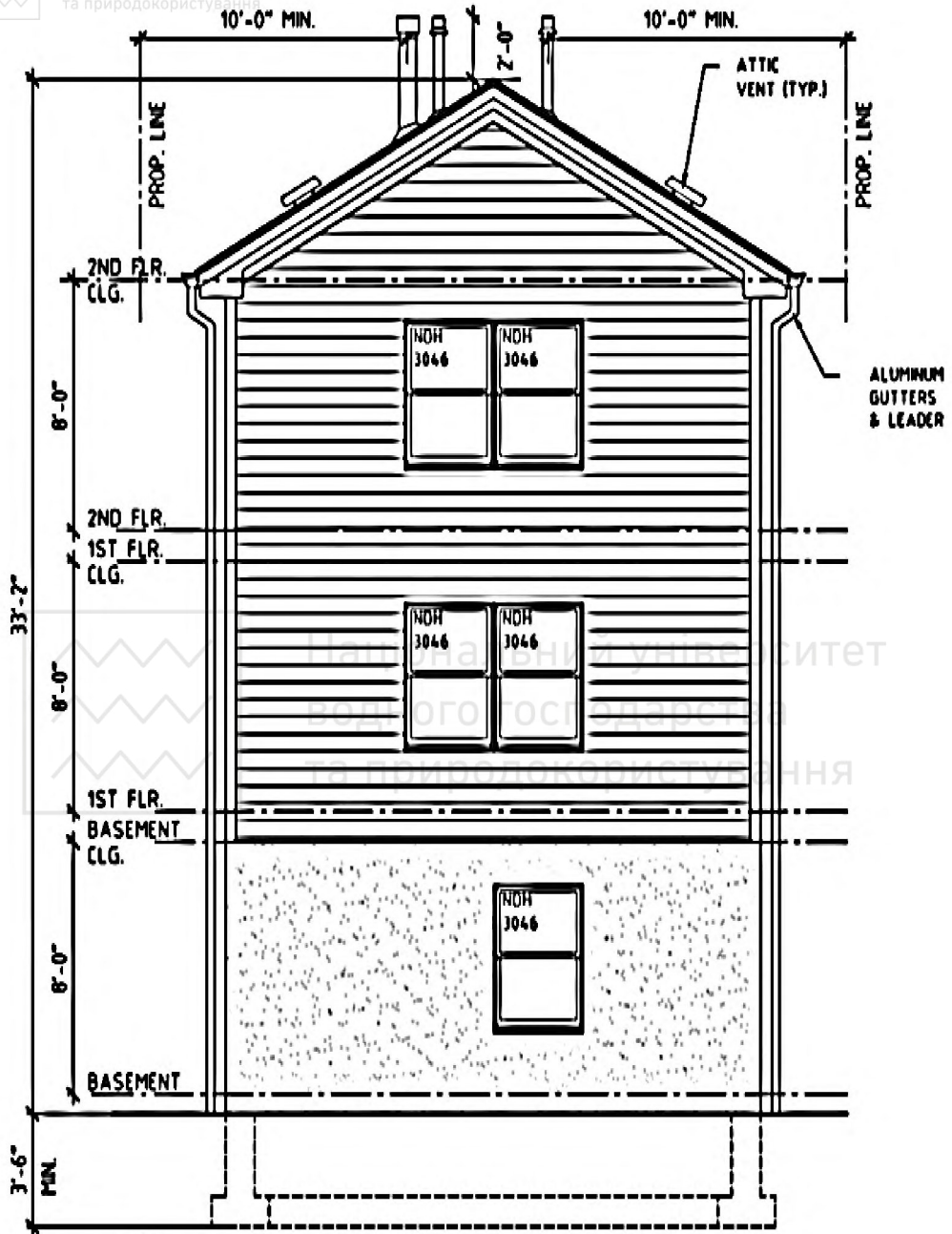
b.



3. Which of the following elevations has no mistakes in the words?



a.



3 REAR ELEVATION
A-3.1 SCALE: 1/4"=1'-0"

b.



After the unit “ELEVATION” fill in the following table about what you have known before and what you have learnt. There is an example of how to do it.

What I have known before	What I have learnt
the word elevation	detailed information about items in elevation of construction project, how to make assumptions about layouts

After the unit “ELEVATION” fill in the following table about what you know and what you can. Estimate your progress and write your opinion about how to improve your progress if you do not have good results and how to continue your progress if you have good ones. There is an example of how to do it.

	Well	Badly
I know detailed information about elevation.	How to continue progress to search for more information about it on the internet, look through the suggested elevations and compare it with a new one.	How to improve knowledge to repeat the learnt words for several times, to watch proposed youtube videos, to fulfill tasks for the second time individually without prompts.
I can make assumptions about layouts.	How to continue progress.	How to improve ability.



UNIT 5. CONSOLIDATION





Task 1.

1. You have become a trainee in an international construction company. You have to show your language proficiency of the construction project. Find mistakes in the words of general characteristics and layouts. Work alone.

Yad, bulding volume, desihn loud schedule, top chod live, atic storage, frontage, botom ckord deed, flour area, paaking spac, balk, blok, bifolt door, doble hang window, fixet window, ilevation indication, stais, owning, plaiwood, garahe, hollway, povdery room, gypsim wallbod, exterio stad wall, door hadware, proparty line, plunter, propety shrab, wind rous, point of beginning, gatter, finich grade, flor line, ceeling line, guerdrail, propty line.

2. Listen to the information about general characteristics, layouts of the construction project. Fill in the following table1 for the construction project. Discuss in pairs the content of the construction project. Use the following phrases after the table. Work in the groups of 3-4 students.

Table 1

Object	Function	Connection with other floors and rooms on its floor	Rooms on the floor
Ground floor	to provide with recreation, study and washing		Study Recreation room Garage
First floor			Kitchen Bedroom Living area Closet Bath
Second floor	to provide with recreation, study		



There are coincidences/ incoincidences with norms.....

There are such cottage levels and floor features...

Agreement. I agree with you on that point. That's a fair suggestion. You have a strong point there. I have no objection. I approve of it. I have come to the same conclusion. I hold the same opinion. We are of one mind / of the same mind on that issue. I have to side with you on this one. No doubt about it. I suppose so./I guess so. You have a point there. That's a good point.

Disagreement. I take a different view. I don't share his/her/your view. I think otherwise. I'd say the exact opposite. I totally disagree. No, I'm not so sure about that. That's not always true. I can't accept this point as being true. That's not always the case. That's not the way I see it.

Clarification of information and disagreement. Could you be more specific? Could you clarify one point for me? Would you say that is a fair representation of your position? What do you mean by ...? I take a different view. I don't share his/her/your view. I think otherwise. I'd say the exact opposite. I totally disagree. No, I'm not so sure about that. That's not always true. I can't accept this point as being true. That's not always the case. That's not the way I see it.

Task 2.

1. You have become a trainee in an international construction company. You have to show your language proficiency of the whole construction project. Circle odd words out for the content of the general characteristics, plot plans, floor plans and elevations. Work alone.

General characteristics: guardrail, gutter, rear yard, front yard, top chord live, bottom chord dead, frontage, wind, living space, sleeping space, lot, zone, frontage, height, lot area, building volume, wall, elevation reference.

Plot plan: property sanitary line, building entrance, floor area, property landscaped area, a property concrete paved area, property shrub, property water line, wind rose, building entrance, point of beginning, bifold door.

Floor plan: interior door, planter, double acting single door, hopper, gypsum wallboard, master bedroom, patio, parking space, frontage, dwelling unit, fixed window, pocket door.



Elevation: coursing, veneer, nonconforming, property shrub, gutter, fascia, swing, accordion, basement, hopper, slate, flashing, finish grade.

2. Find which facts from the construction project affirm that environmentally friendly building materials are used for the construction of the house; there is the partial coincidence with required norms; there is much space near the house; there are several types of doors and windows; there is a simple exterior design of the house. Work in the groups of 3-4 students.

Task 3.

You have become trainees in an international construction company. You are being checked your language proficiency of the construction projects. Find mistakes about the usage of articles in the layouts, plural and singular forms of words in the layouts and general characteristics. Find wrong sentences in notes. Change them into typical sentences for notes. Work in the groups of 3-4 students.

ZONING CHART

Address		10 East 18 th street, Bayonne, New Jersey		
Block		14		
Lot		232		
Zone		R-2		
Principal use		Detached/attached residential, detached double family permitted		
Bulk and yard	Required	Proposed	Variance required	Remarks
Min. lot areas	3000 S.F.	2545 S.F.	No	Existing, non-conforming
Min. frontage	30 FT.	25 FT.	No	Existing, non-conforming
Min. lots width	30 FT.	25 FT.	No	Existing, non-conforming
Min. lot depth	100 FT.	101. 27 FT.	No	



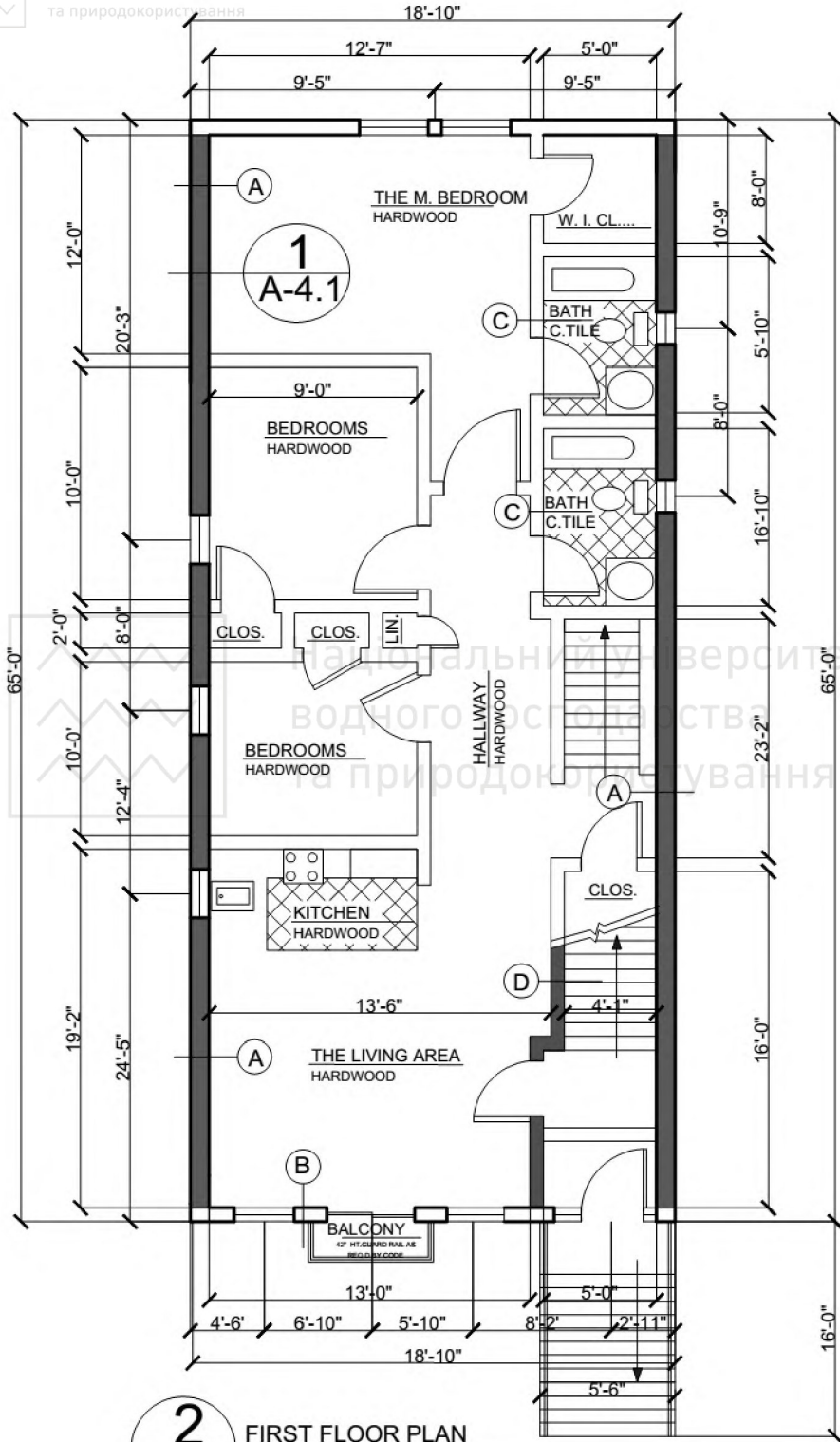
Min. front yard	20'-0'' or prevailing	16'-0''	No	Prevailing setback
Min. rear	20'-0''	20'-5''	No	
Min. side yard	3'-0'' (one) 6'-0'' (both)	3'-1''(one) 6'-2''(both)	No	
Parking space	1-1/2 spaces per dwelling unit	3	No	

3. BUILDING CHARACTERISTICS

Construction type	5A
Use group	R5
Floor area	Ground floor 1201 S.F. First floor 1224 S.F. Second floor 1224 S.F. Gross floor area 3649 S.F.
Building volumes	36.720 CU.FT.

4. DESIGN LOAD SCHEDULE

Roof		Floors	
Top chord live	30 PSF	Living spacs	40 PSF
Top chord dead	10 PSF	Living spacs	10 PSF
Bottom chord dead	5 PSF	Total	50 PSF
Total	45 PSF		
		Sleeping spacs	30 PSF
Attic storage	20 PSF	Sleeping spacs	10 PSF
Wind	90 MPH	Total	40 PSF



2 FIRST FLOOR PLAN
A-2.1 SCALE 1/4"-1'-0"
NOTE OUTLET SPACING SHALL
COMPLY WITH NEC 210



Notes

1. You have to go to protect adjacent building's foundation against the elements and brace the existing wall. Under no circumstances you have to undermine the existing footing.

This plot plan will be based on a survey prepared by Matthew R. Fox. Professional engineer and land surveyor of Canger Engineering Associates.

Concrete paved area is to be around the building.

Driveway ditches do not have disposal water.

All exterior walls will use gypsum board inside.

All interior walls can be wall type C.

One should provide in wall blocking at all millwork.

We must fill in depressed floor areas with concrete floor fill.

They need to wrap around all arch, fire rated wall with gypsum board.

2. You have become trainees in an international construction company. You are passing an experimental period. Your understanding of the construction project is going to be checked. Choose the correct engineering concepts for this construction project and owner's demands. Make up the presentation of them. See supplement 4. Work alone.

Owner's demands: 1. a lot of landscaped area near the house; 2 the house has to be far to adjacent buildings 3. environmentally friendly building material for the driveway has to be chosen.

a. Planning concept 1

The staircase has to come out the grade. The house has to be located closer to the grade.

b. Constructive concept 1

Concrete driveway has to be changed into wooden one.

c. Planning concept 2

Planters have to be added behind, to the right and to the left from the house. The distance between the house and adjacent buildings has to be decreased.

d. Constructive concept 2

Concrete driveway has to be changed into steel driveway.

3. You have become trainees in an international construction company. Your understanding of the construction project is going to be checked. Choose appropriate reasons and conclusions for family residence.



Remember! If there is a small load on the roof and the floor, roof and floor are made of light materials (wood, light metal). If there is a big load, they are made of hard metals (concrete, iron)

Reasons	Conclusions
<p><u>Zoning chart</u> Reason 1. There are peculiarities of natural terrain. There is a big distance between streets. Many buildings are planned to be built on this lot. Reason 2. There is a small distance between streets. Few buildings are planned to be built on this lot.</p>	<p><u>Zoning chart</u> Conclusion 1. Depth is bigger than width.</p>
<p><u>Building characteristics</u> Reason 1. The thickness of exterior walls of the ground floor is smaller than the thickness of the first and the second floor. The entrance to garage is located in such a way that the front wall is located into the exterior side of garage.</p>	<p><u>Building characteristics</u> Conclusion 1. Ground floor has the lowest general area.</p>



<p>Reason 2. The thickness of exterior walls of the ground floor is bigger than the thickness of the first and the second floor. The entrance to garage is located in such a way that the front wall is located into the interior side of garage.</p>	
<p><u>Design load schedule</u> Reason 1 There is a big load on roof and floors. Reason 2. There is a small load on roof and floors.</p>	<p><u>Design load schedule</u> Conclusion 1. Light metal roof can be designed.</p>
<p><u>General notes</u> Reason 1. Contractor is responsible for everything except for submitting of a certificate of occupancy approved by the building department to the owner. He does nothing upon completion of the project. Reason 2. Contractor has to check all dimensions and submit a certificate of occupancy approved by the building department to the owner.</p> <p><u>Plot plan</u> Reason 1. There is a planter, new concrete driveway, front and rear yards. Reason 2. There are many adjacent buildings near the house.</p>	<p><u>General notes</u> Conclusion 1. There are many duties for contractor.</p> <p><u>Plot plan</u> There is much landscaped area around the house.</p>



<p><u>Floor plan</u> иродокористування</p> <p>Reason 1. There are too many storages.</p> <p>Reason 2. There are two bathrooms, two garages and six bedrooms.</p>	<p><u>Floor plan</u></p> <p>There is much odd living space.</p>
---	--

4. You have become trainees in an international construction company. Put the words in the correct order. Choose the correct explanations of putting plot and floor plan notes into practice.

Explanation of putting notes into practice.

1. Go elements to protect adjacent building's foundation against the
 - a. To carry out damp proofing of foundation from water.
 - b. To increase inclination of covering to the side of existing footing.

Explanation of putting notes into practice.

2. Shall undermined existing footing be no under circumstances.
 - a. If to undermine, there will be cracking in the building.
 - b. The properties of soil will be improved.

Explanation of putting notes into practice.

3. Filler door all and window headers shall plywood be.
 - a. Water resistant plywood for windows and external doors.
 - b. Thin nonwater resistant plywood.

Explanation of putting notes into practice.

4. Inside all to exterior walls board use gypsum wall.
 - a. Fasten to the wall with screws.
 - b. To glue gypsum.

Explanation of putting notes into practice.

5. Min. provide air space between sheathing and brick veneer.
 - a. Application of thin battens.
 - b. Usage of big size brick.

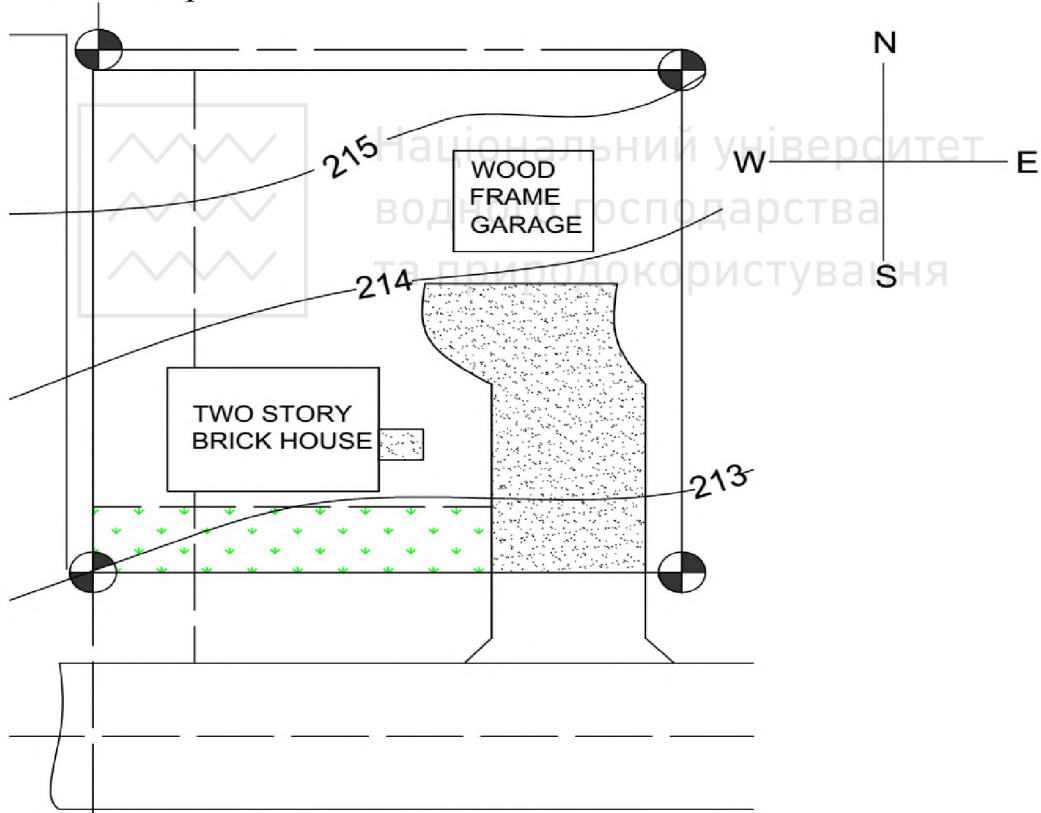


After the unit “**CONSOLIDATION**” test your professional and

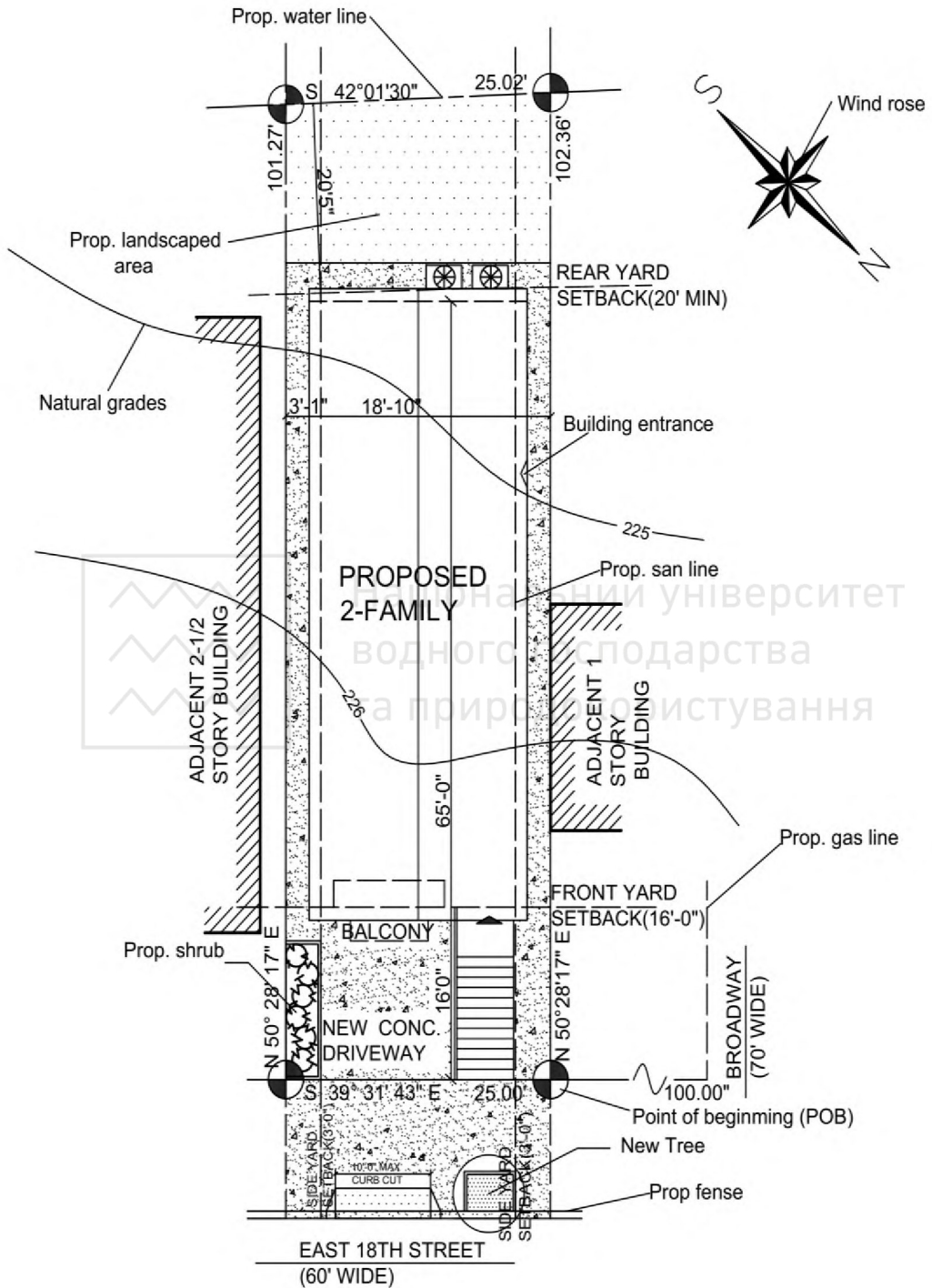
linguistic competence. Mark the correct variant.

1. Which of the following sentences belongs to concepts?
 - a. Planters have to be added behind, to the right and to the left from the house. The distance between the house and adjacent buildings has to be decreased.
 - b. Concrete driveway has to be changed into the wooden one.
2. Which of the following layouts with notes corresponds to the following planning concept?

The plot plan has to be accessorized with landscaped area. There should be some tall shrubs on the right of driveway and some lower shrubs on the left of the porch.



- a. Driveway to have water disposal ditches. Concrete paved area shall be around the building. Existing footing shall be undermined.



b. Under no circumstances existing footing shall be undermined. Go to protect adjacent buildings. Brace the existing wall.



3.1. Which of the following elevations corresponds to the following demands (wood panel veneer, property lines, brick coursing above all windows)?

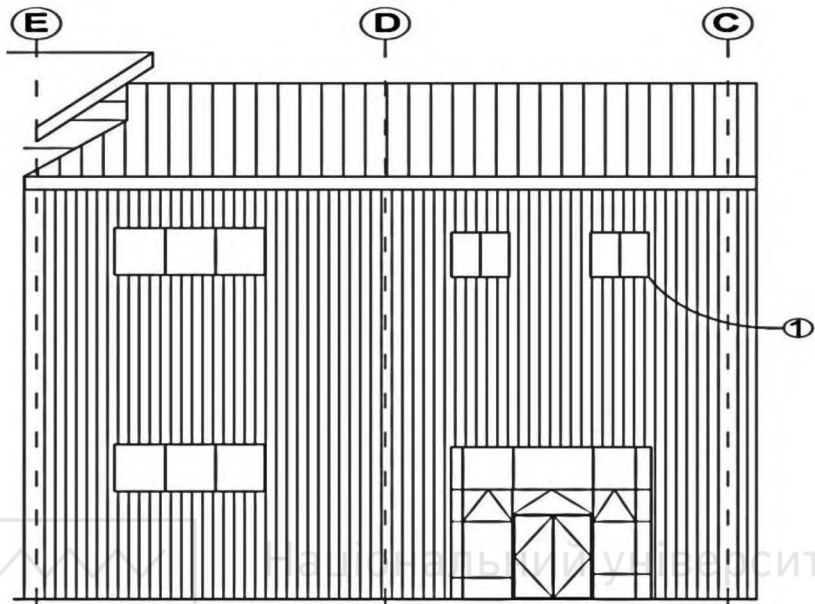


a.



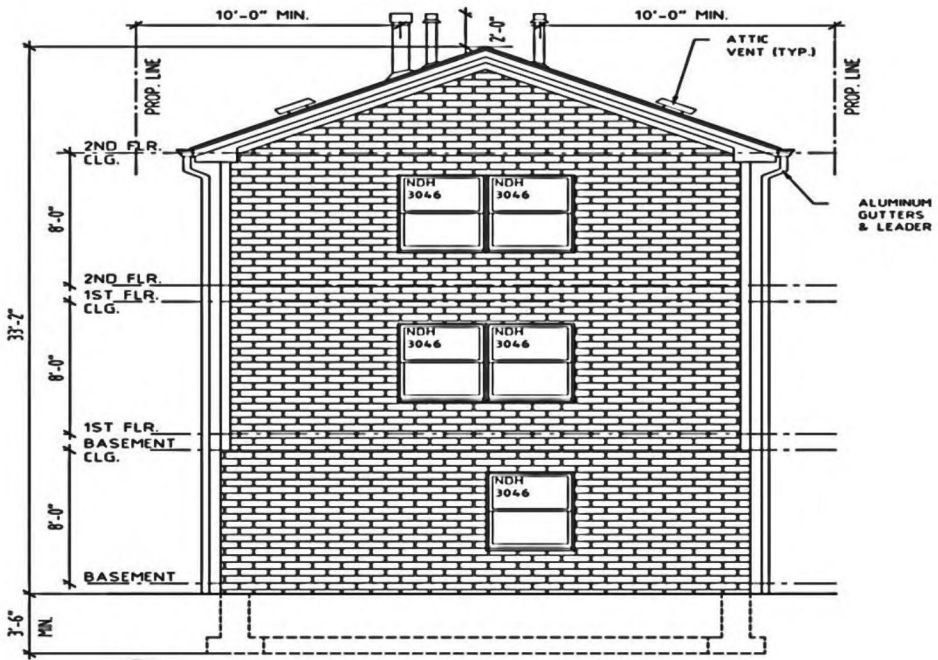
b.

3. 2. Which of the following elevations corresponds to such owner's demand as veneer with expensive and environmentally friendly building material?



a.

(A) NORTH ELEVATION

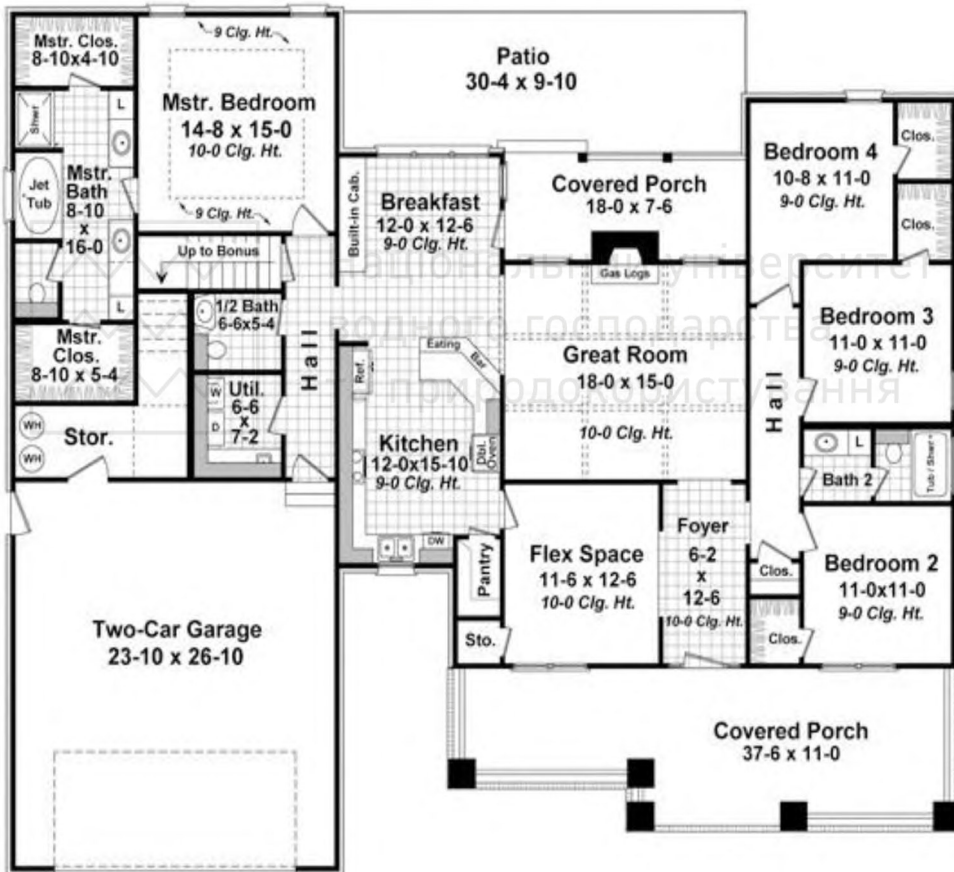


b.

(3) REAR ELEVATION
 A-31 SCALE: 1/4"=1'-0"



4. Which of the following sentences belongs to constructive concepts?
- a. Two bathrooms shall be combined in one. Space can be decreased because of changed staircase.
 - b. Ceramic brick walls shall be changed into concrete ones. Wooden partitions should be made.
5. Which of the following layouts with notes corresponds to the following planning concept?
- Planning concept: the location of rooms should be changed; additional rooms should be added; double doors should be changed into single doors.

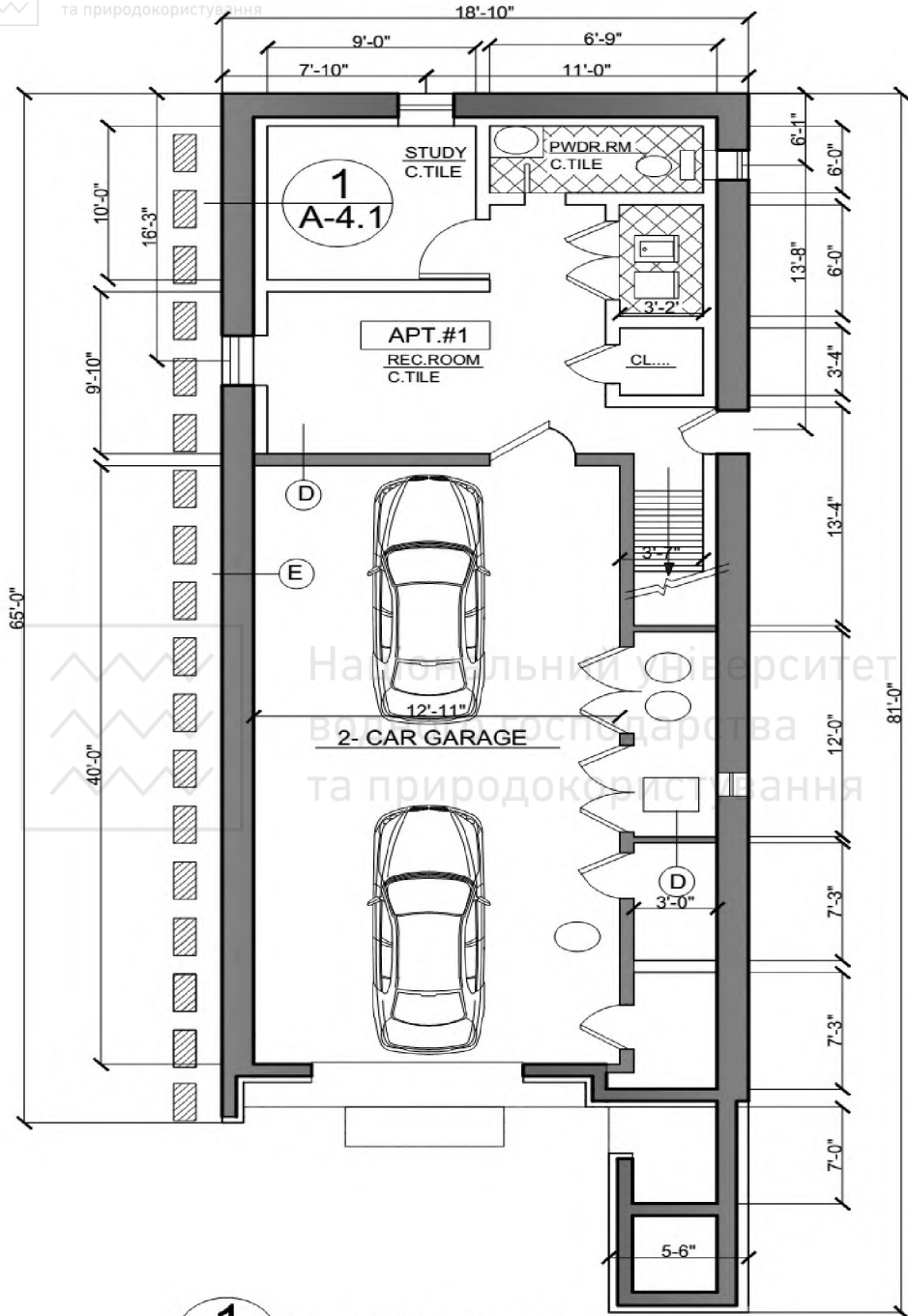


a.

See structural drawings for additional dimensional information.
Provide wood blocking at all millwork.



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1
A-2.1

GROUND FLOOR PLAN
SCALE 1/4"-1'-0" NOTE SEE
FRAMING PLANS FOR FRAMING
SIZES & DIRECTION

b.



SUPPLEMENT 1

Sample of the construction project “Two family residence”

1. GENERAL NOTES

The architects administration of the construction work by mutual consent is not the part of this agreement. The owner or general contractor shall appoint a person to be in charge of the work per construction control execution.

PERMITS. The contractor shall be responsible for obtaining and paying for all the required permits, inspections.

PROJECT COMPLETION. Upon completion of the project, the contractor must submit a certificate of occupancy approved by the building apartment to the owner.

PRODUCT OPTIONS. It is the contractor’s responsibility to select products which comply with the contract documents which are compatible with one another, with existing work. The products selected by other contractors provide manufacturer’s information.

SUBSTITUTIONS. Submission of a substitution request by the contractor where permitted on the contract documents shall constitute a representation by the contractor that he/she has investigated the proposed product or conditions and determined that it is equal to or better than the specified product or condition including warranty coverage.

The following shall be furnished and coordinated by the contractor or owner shall not be part of the scope of work on these construction documents.

- demolition of any or all existing structures, pavement or trees.
- site engineering including but not limited to site grading, soil investigations, environmental
- investigations, sit drainage, landscaping, driveways, retaining walls, utilities, septic, where applicable and other improvements outside the building.

Notify the architect if the proposed use is not in accordance with local and state requirements. Provide the architect with any necessary documentation including zoning, setbacks, environmental regulations or any similar constraints which may affect the project. However, in no case shall any part of the dwelling be located within property line without approval of the architect



Do not scale drawings. Written dimensions shall govern.

Contractor shall check, verify and maintain all dimensions, grades, levels and other conditions before proceeding with fabrication and construction. Coordinate exact locations of equipment, fixtures and outlets with finished elements where necessary.

SHOP DRAWINGS. Contractor shall furnish shop drawings for all shop fabricated items.

CUTTING AND PATCHING. Include all cutting and patching for penetrations through floors, walls, ceilings and roofs. Do not cut or notch any structural member to reduce its load carrying capacity.

UNFORSEEN CONDITIONS. Should unforeseen conditions be encountered that affect design or function of the project.

Provide temporary facilities, service utilities and protection as required to safely executing all work. Protect adjacent construction and inhabitants.

RECORD DRAWINGS. The contractor shall maintain and prepare a complete set of record construction drawings.

INSURANCE. All contractors and subcontractors shall take out and maintain workman's compensation insurance.

SUBSTANTIAL COMPLETION. Contractor shall procure final certificate of occupancy upon completion of the project.

WARRANTIES. Unless otherwise noted, contractor is to provide written warranty for a period of one year from the date of substantial completion.

STRUCTURAL STEEL shall conform to specifications.

2. ZONING CHART

Address		10 East 18 th street, Bayonne, New Jersey		
Block		14		
Lot		232		
Zone		R-2		
Principal use		Detached/attached residential, detached double family permitted		
Bulk and yard	Required	Proposed	Variance required	Remarks
Min. lot area	3000 S.F.	2545 S.F.	No	Existing, non-conforming
Min. frontage	30 FT.	25 FT.	No	Existing, non-conforming



Min. lot width	30 FT.	25 FT.	No	Existing, non-conforming
Min. lot depth	100 FT.	101. 27 FT.	No	
Min. front yard	20'-0'' or prevailing	16'-0''	No	Prevailing setback
Min. rear yard	20'-0''	20'-5''	No	
Min. side yard	3'-0'' (one) 6'-0'' (both)	3'-1''(one) 6'-2''(both)	No	
Parking spaces	1-1/2 spaces per dwelling unit	3	No	

3. BUILDING CHARACTERISTICS

Construction type	5A
Use group	R5
Floor areas	Ground floor 1201 S.F. First floor 1224 S.F. Second floor 1224 S.F. Gross floor area 3649 S.F.
Building volume	36.720 CU.FT.

4. DESIGN LOAD SCHEDULE

Roof		Floors	
Top chord live	30 PSF	Living spaces	40 PSF
Top chord dead	10 PSF	Living spaces	10 PSF
Bottom chord dead	5 PSF	Total	50 PSF
Total	45 PSF		
		Sleeping spaces	30 PSF
Attic storage	20 PSF	Sleeping spaces	10 PSF
Wind	90 MPH	Total	40 PSF



5. **OWNER INFORMATION**

JKH Consulting, Inc.
c/o John Hastie
13 Stone Bridge drive
Green township, New Jersey 07821
908-413-7358

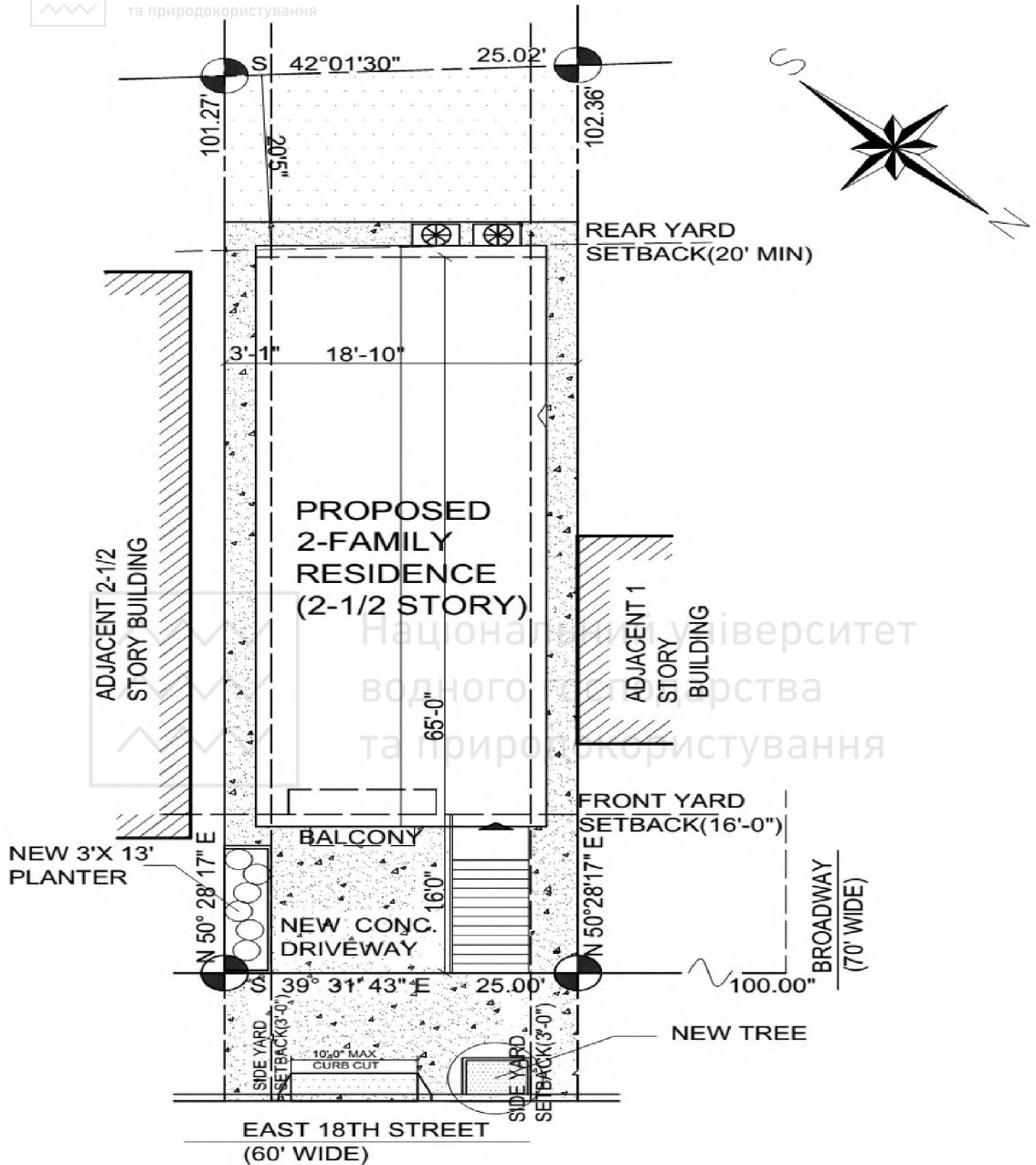
6. **LIST OF DRAWINGS**

A-1.1. – Plot plan and gen. notes
A-2.1. – Prop. floor plan
A-2.2. – Prop. elevation





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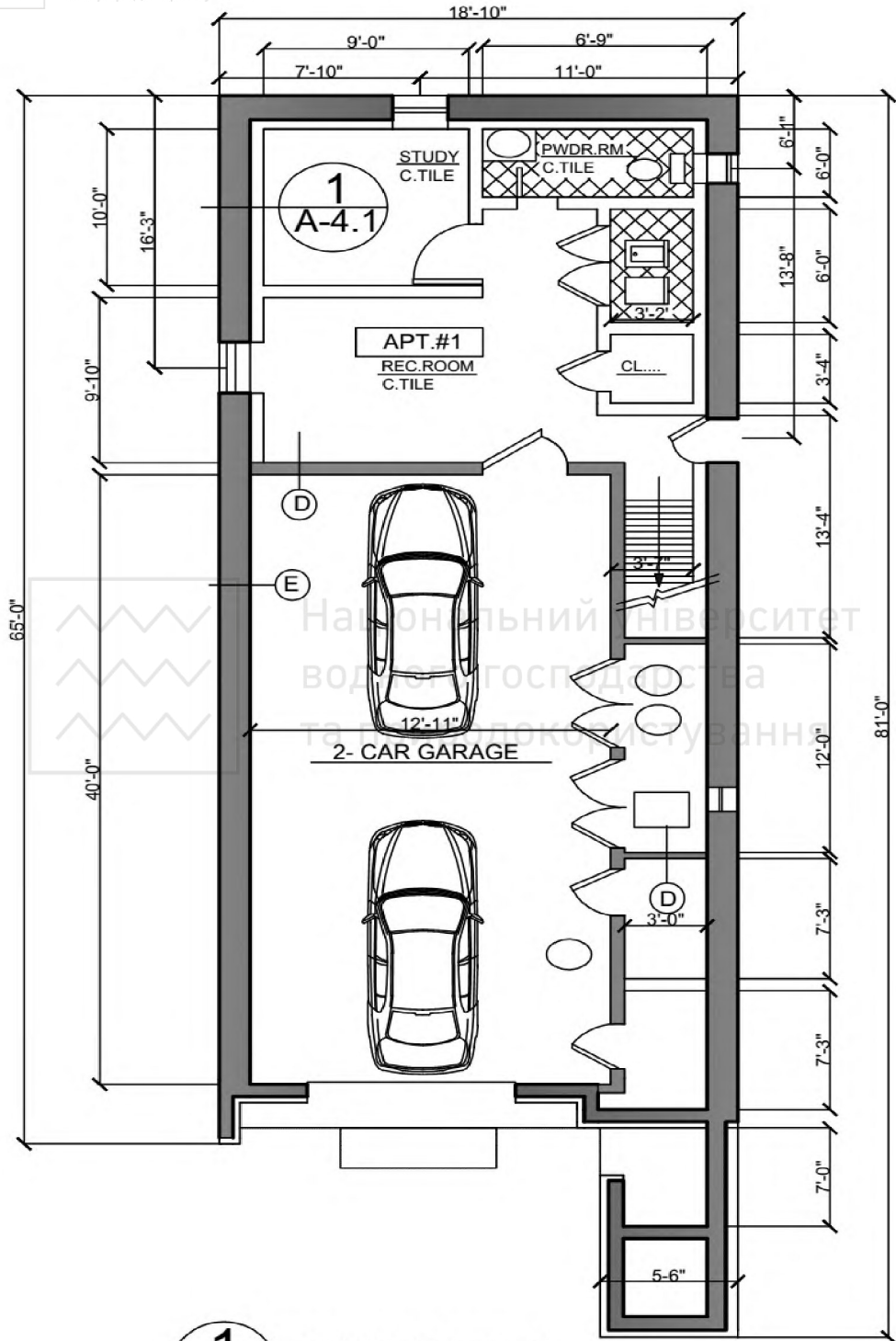
PLOT PLAN

Note: Go to protect adjacent building's foundation against the elements and brace the existing wall. Under no circumstances shall the existing footing be undermined.

This plot plan is based on a survey prepared by Matthew R. Fox. Professional engineer and land surveyor of Canger Engineering Associates 6-20 Plaza road

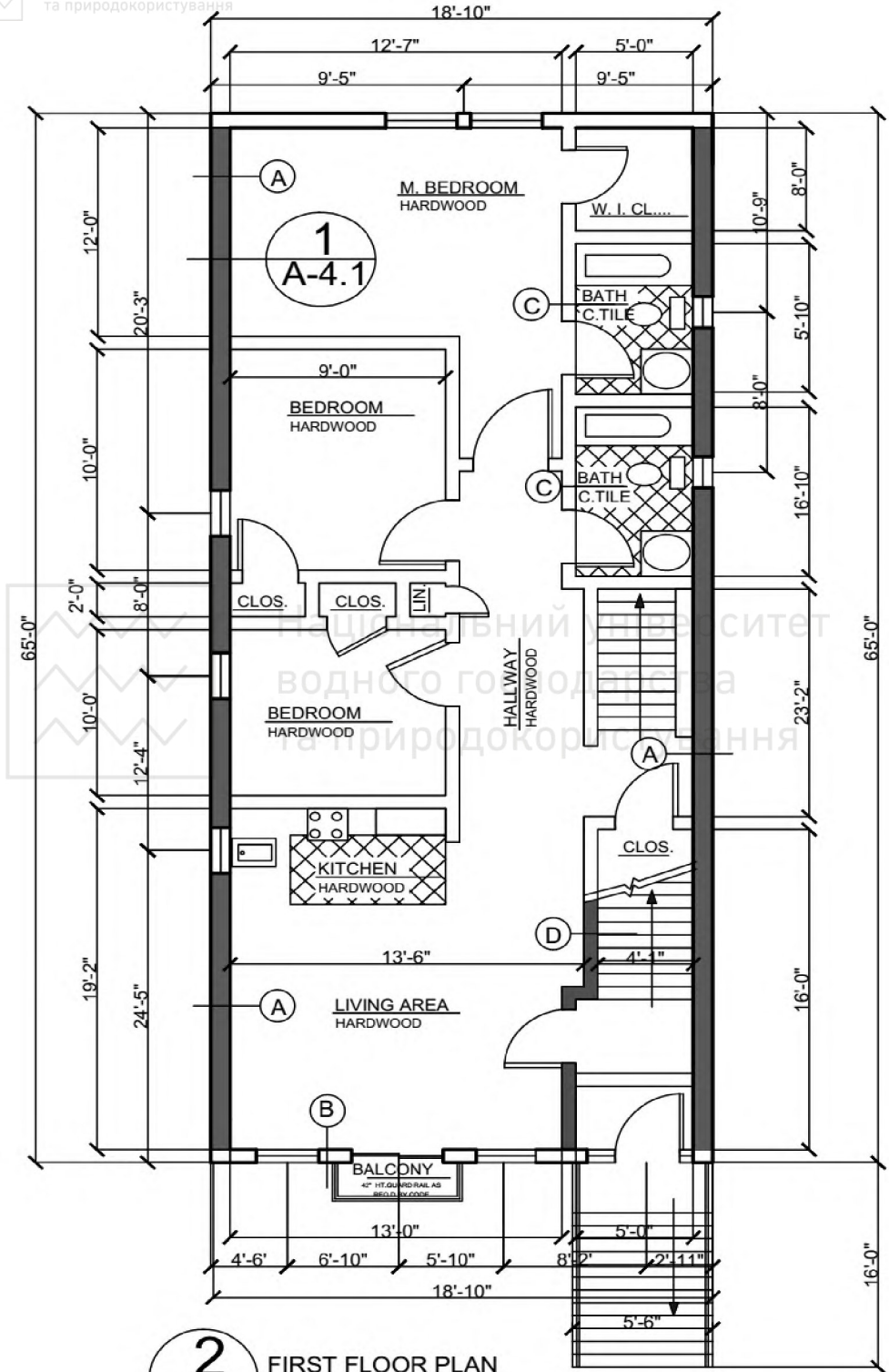


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та природокористування



1
A-2.1

GROUND FLOOR PLAN
SCALE 1/4-1'-0" NOTE SEE
FRAMING PLANS FOR FRAMING
SIZES & DIRECTION

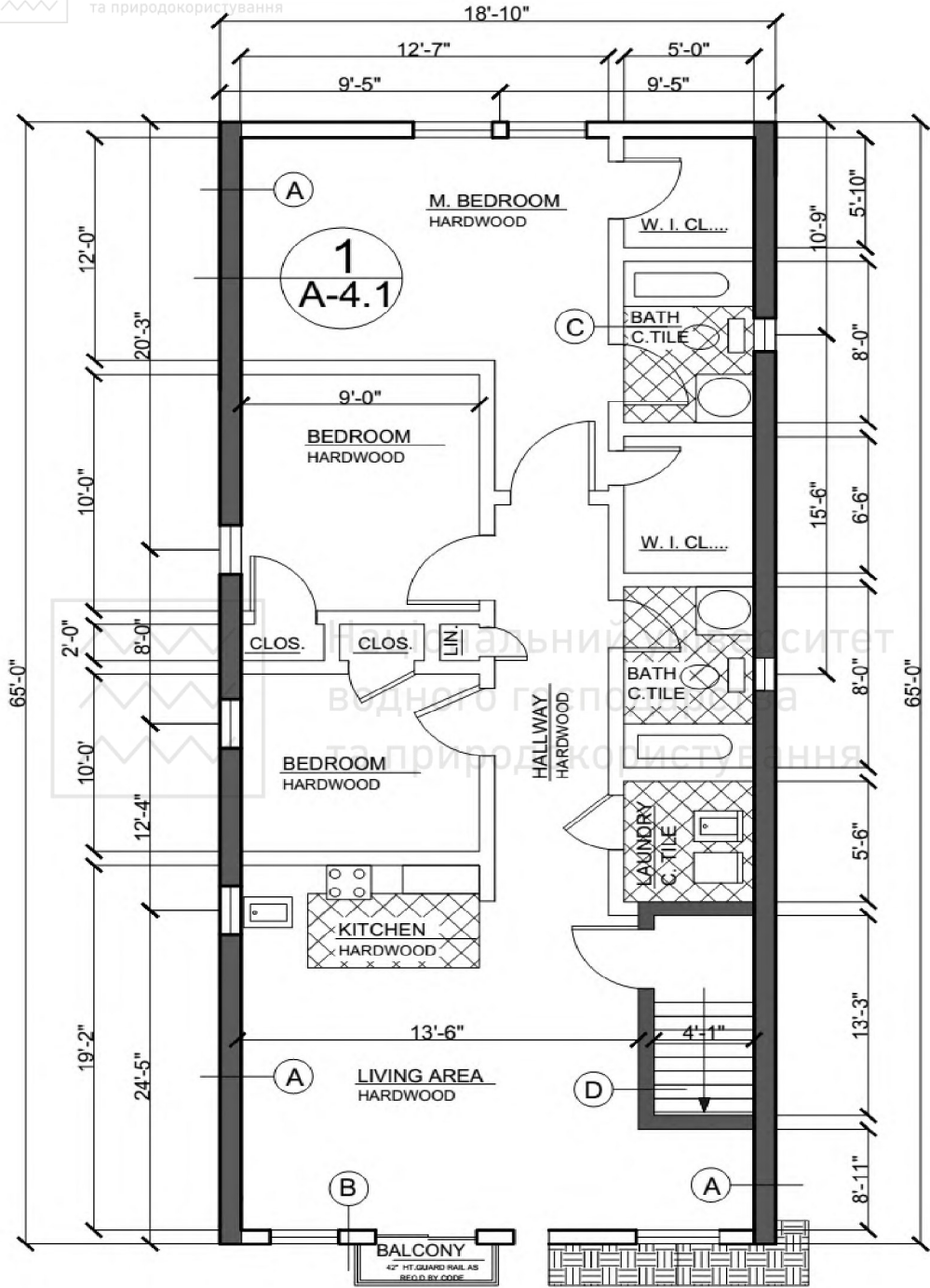


2
A-2.1

FIRST FLOOR PLAN

SCALE 1/4"-1'-0"

NOTE OUTLET SPACING SHALL
COMPLY WITH NEC 210



3
A-2.1 **SECOND FLOOR PLAN**
SCALE 1/4-1'-0"
NOTE OUTLET SPACING SHALL
COMPLY WITH NEC 210

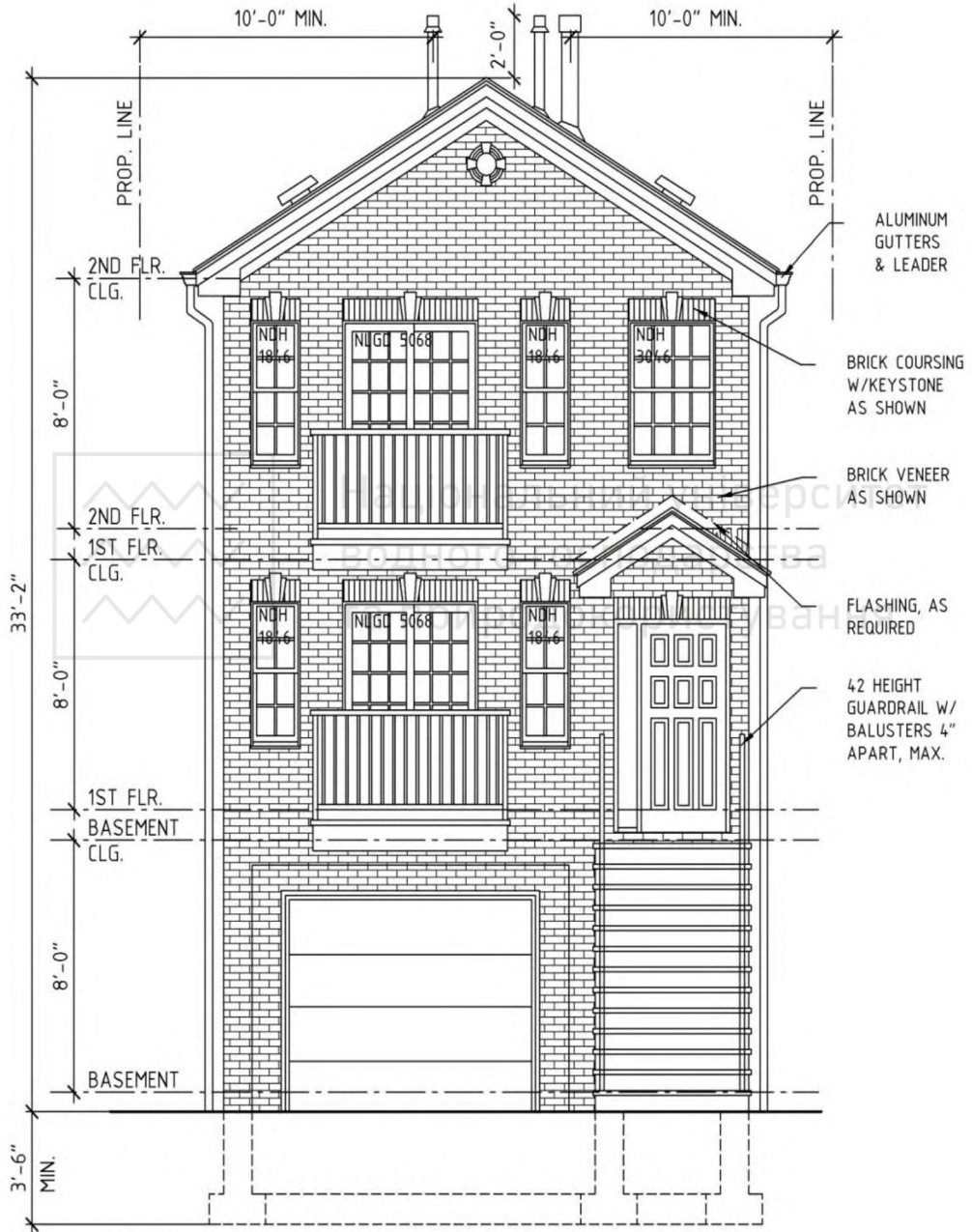


Wall schedule

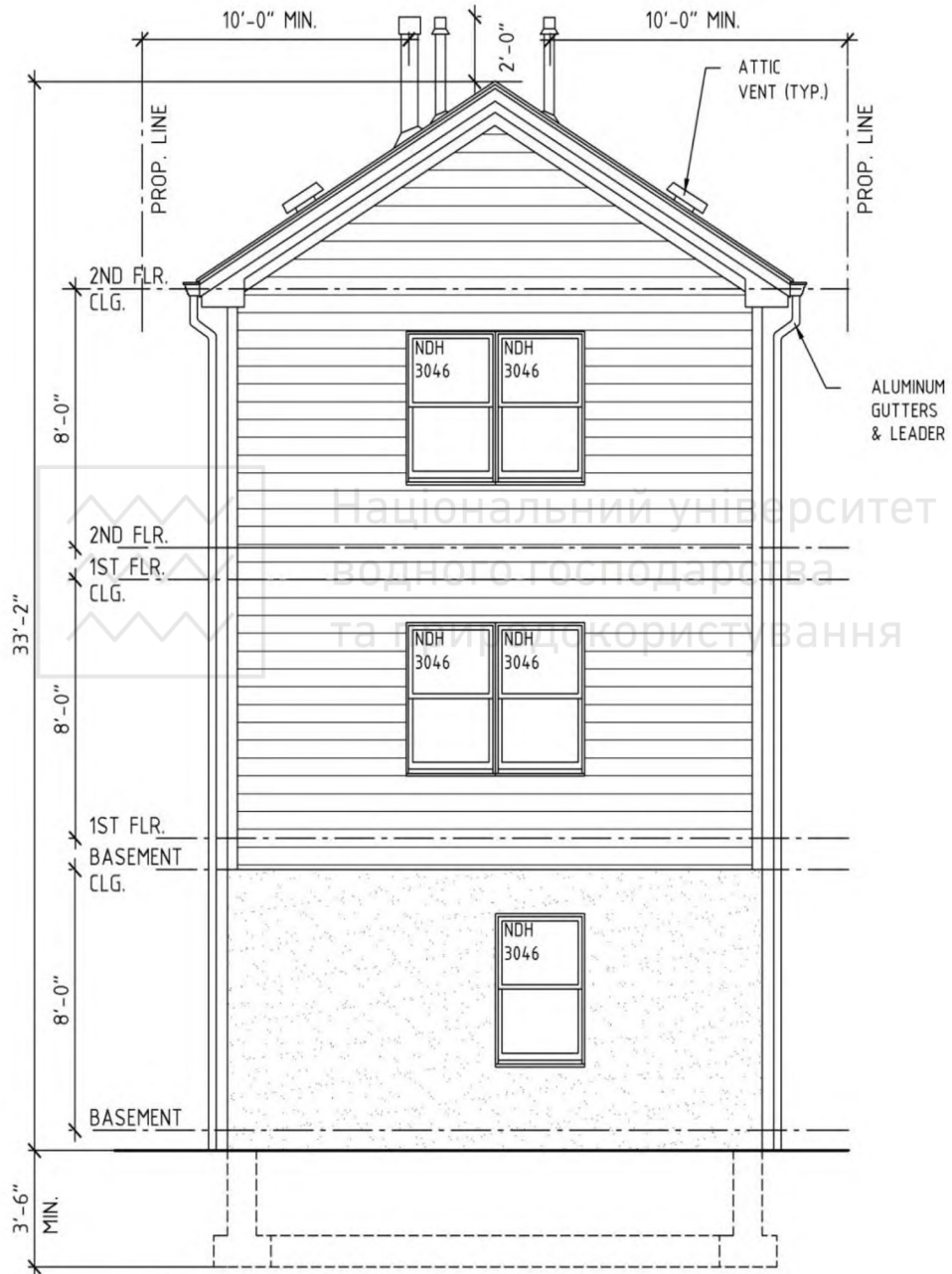
Mark	Description	Remarks
A	Exterior stud wall	Siding color as selected by owner
B	Exterior stud wall / Brick veneer	Provide min. air space between sheathing and brick veneer
C	Interior wall Typ. with gypsum wall board	
C1	Add batt insulation	
D	Interior wall Typ. with gypsum wallboard	
D1	Stud spacing	
E	CMU wall	Use CMU wall below grade Provide brick shelf at front wall.
Note: All exterior walls to use gypsum board inside.		Note: All interior walls shall be wall type C.

Note:

- All door hardware to be selected by owner.
- All door and window headers shall be plywood filler unless otherwise noted.
- All interior finishes shall be selected by owner.






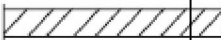
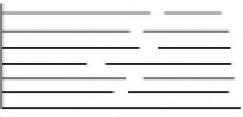


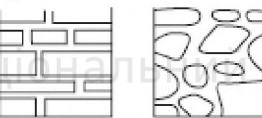



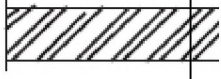
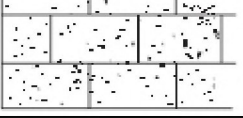


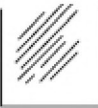






1 FRONT ELEVATION
A-3.1 SCALE: 1/4"=1'-0"







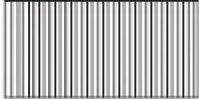

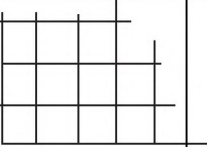
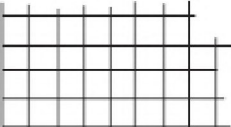




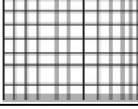



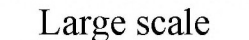
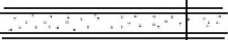

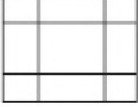

3 REAR ELEVATION
A-3.1 SCALE: 1/4"=1'-0"



SUPPLEMENT 2

Typical building symbols of a construction			
Material	Plan	Elevation	Section
Wood	Floor areas left blank	 Siding Panel	 Framing Finish
Brick	 Face  Common	 Face or common	Same as plan view
Stone	 Cut  Rubble	 Cut Rubble	 Cut Rubble
Concrete			Same as plan view
Concrete block			Same as plan view
Earth	None	None	
Glass		 	 Large scale  Small scale
Insulation	Same as Section	 Insulation	 Loose fill or batt  Board



Plaster	Same as Section		Plaster	Stud 
Structural steel		Indicate by note		Lath and plaster
Sheet metal flashing	Indicate by note			Show contour
Tile		Floor		Wall
		None	None	
Plywood	Indicated by note	Indicated by note		
Batt insulation		None	None	Same as plan
Rigid insulation		None	None	Same as plan
Glass				Small scale
				Large scale
Gypsum wallboard			None	Same as plan
Acoustica 1		None		




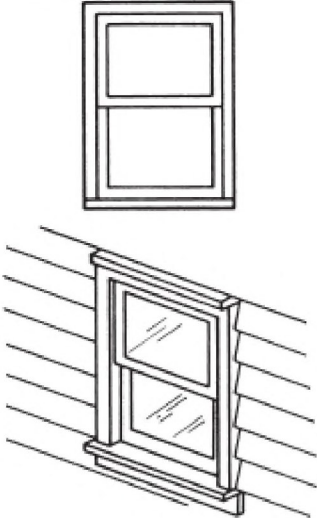

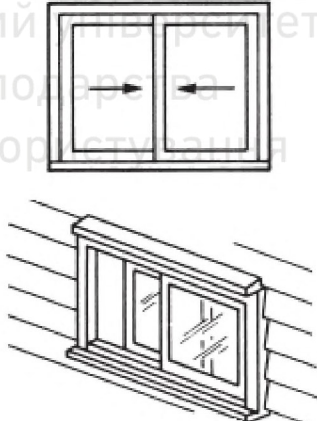
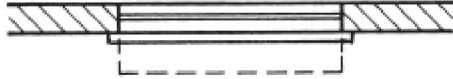
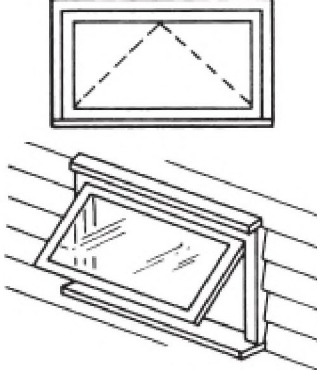
Ceramic wall tile			Same as plan
Floor tile		None	

WINDOW AND DOOR SYMBOLS		
Type	Plan	Elevation
Double hung windows		
Casement windows		
Slider		
Exterior door		
Interior door		



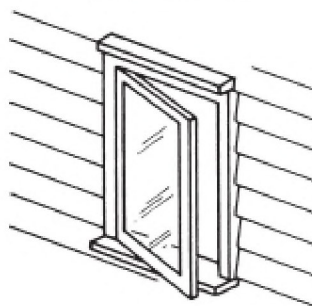
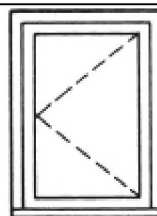
<p>Bifold door</p>		
<p>Swing</p>		
<p>Sliding</p>		
<p>Accordion</p>		
<p>Bi-fold</p>		



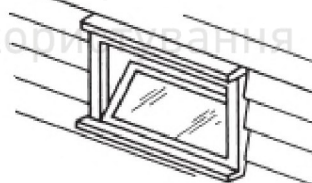
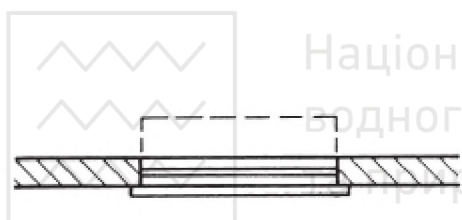
PLAN	ELEVATION
DOUBLE HUNG	
	
SLIDING	
	
AWNING	
	



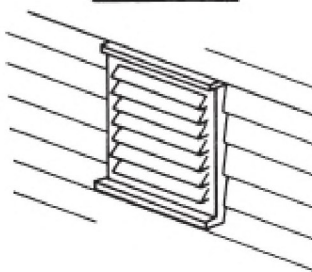
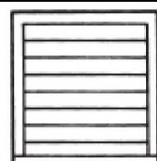
CASEMENT



HOPPER

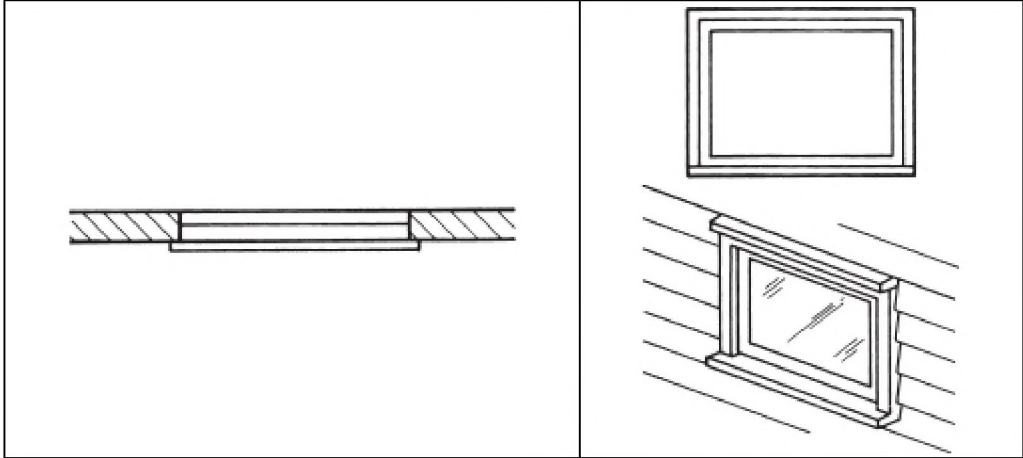


JALOUSIE



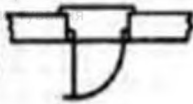


FIXED





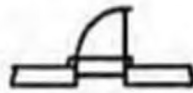
**SINGLE DOOR,
OPENING INWARD**



**DOUBLE DOOR,
OPENING INWARD**



**SINGLE DOOR,
OPENING OUT**



**DOUBLE DOOR,
OPENING OUT**



**SINGLE DOOR,
INTERIOR**



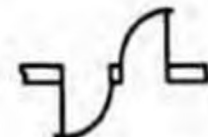
**DOUBLE DOOR,
INTERIOR**



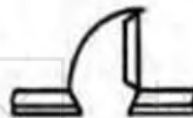
**DOUBLE-ACTING
SINGLE DOOR**



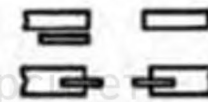
**IN AND OUT
DOORS**



**REFRIGERATOR
DOOR**

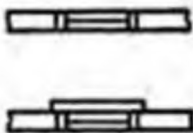


SLIDING DOORS

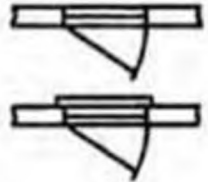


TYPICAL DOOR TYPES

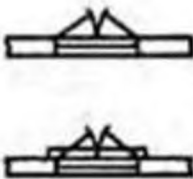
DOUBLE HUNG



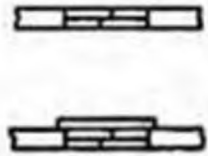
**SINGLE,
OPENING IN**



**DOUBLE,
OPENING OUT**



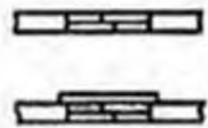
**RIGHT SASH
OVER LEFT**

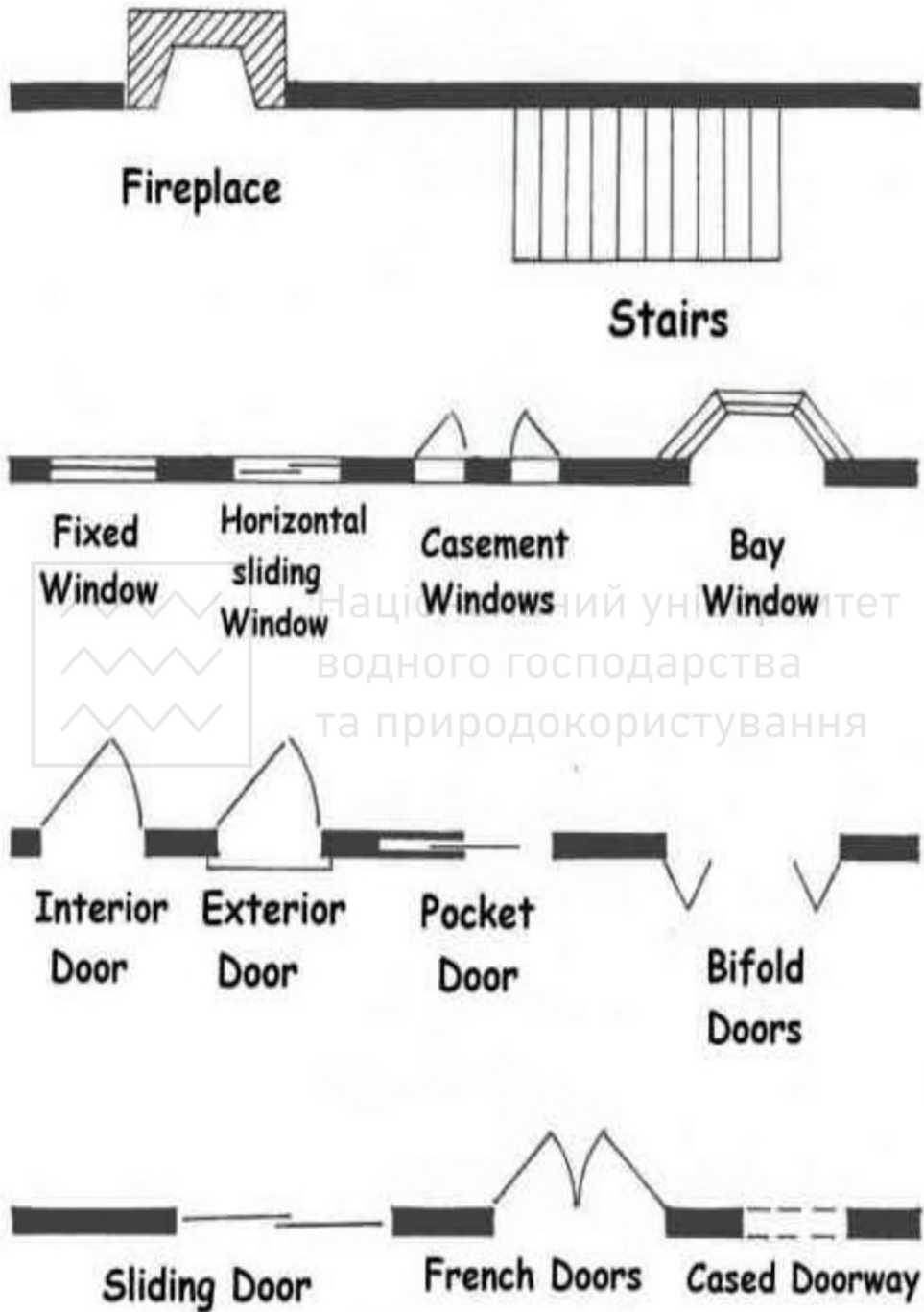


**PIVOTED AND
VENTED**



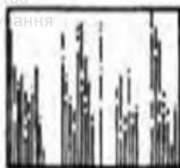
**LEFT SASH
OVER RIGHT**







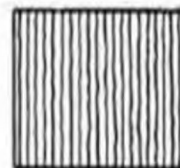
**GLASS,
CROSS SECTION**



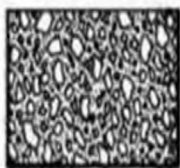
METAL



SAND



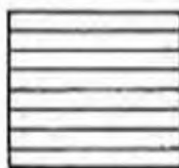
**TILE, CERAMIC,
STRUCTURAL; FACING**



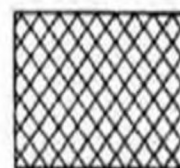
GRAVEL



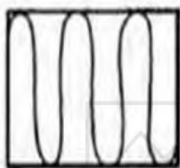
PLYWOOD



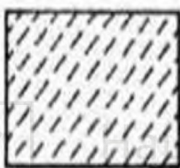
SLATE



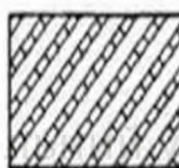
TIN



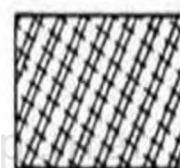
**INSULATION,
THERMAL ACOUSTICS**



PORCELAIN



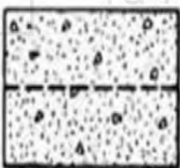
**SPECIAL
ALLOYS**



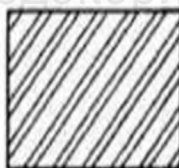
TITANIUM



LIQUIDS



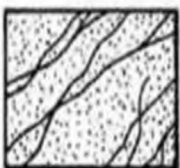
**REINFORCED
CONCRETE**



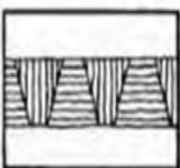
**STEEL AND
WROUGHT IRON**



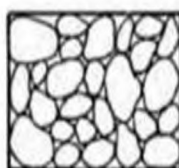
WIRE MESH



MARBLE



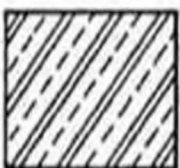
ROCK



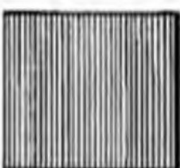
STONE



**WOOD WITH GRAIN
CROSS GRAIN; BLOCKING**



MATERIAL



ROOFING



STUCCO,

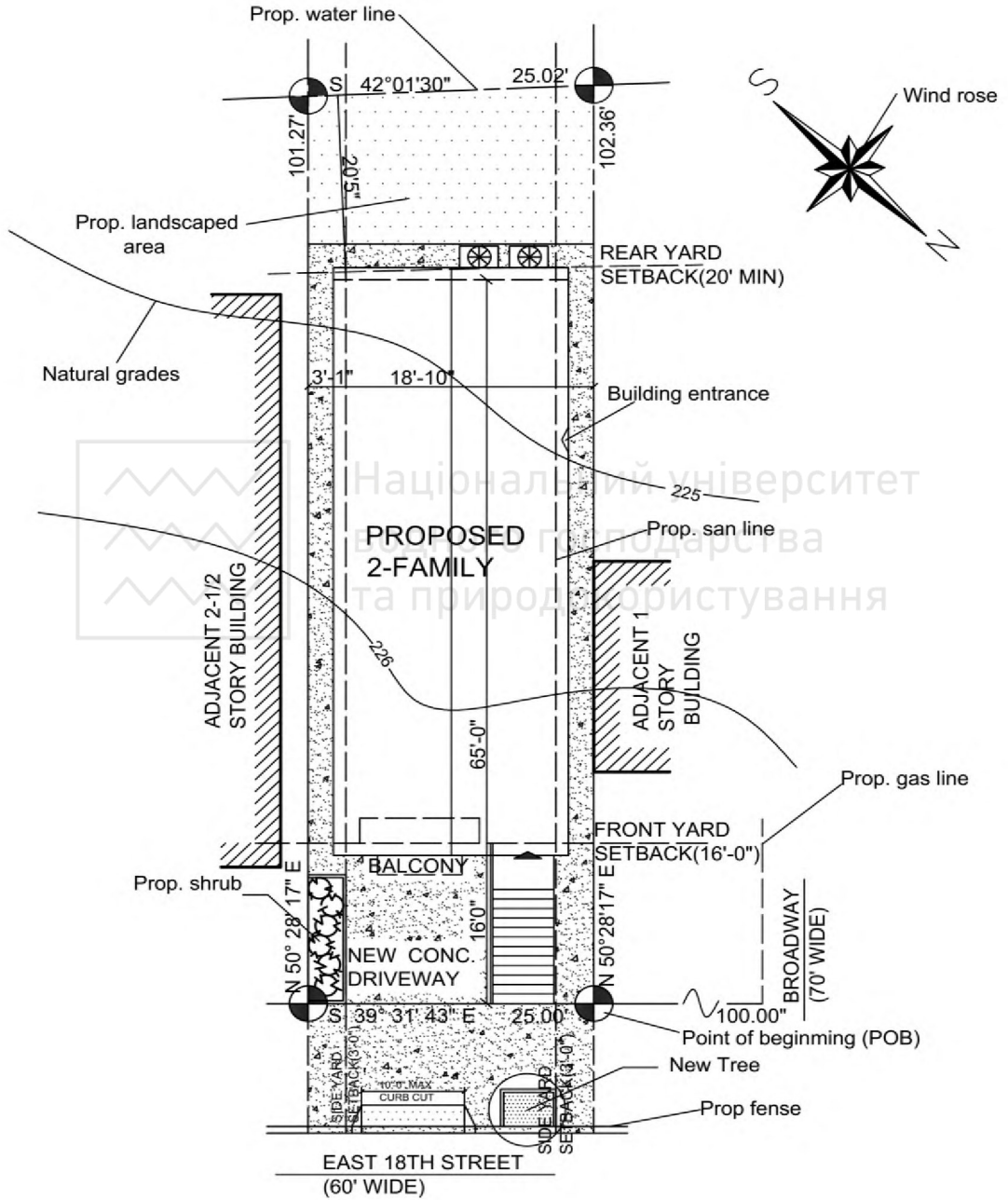


ZINC

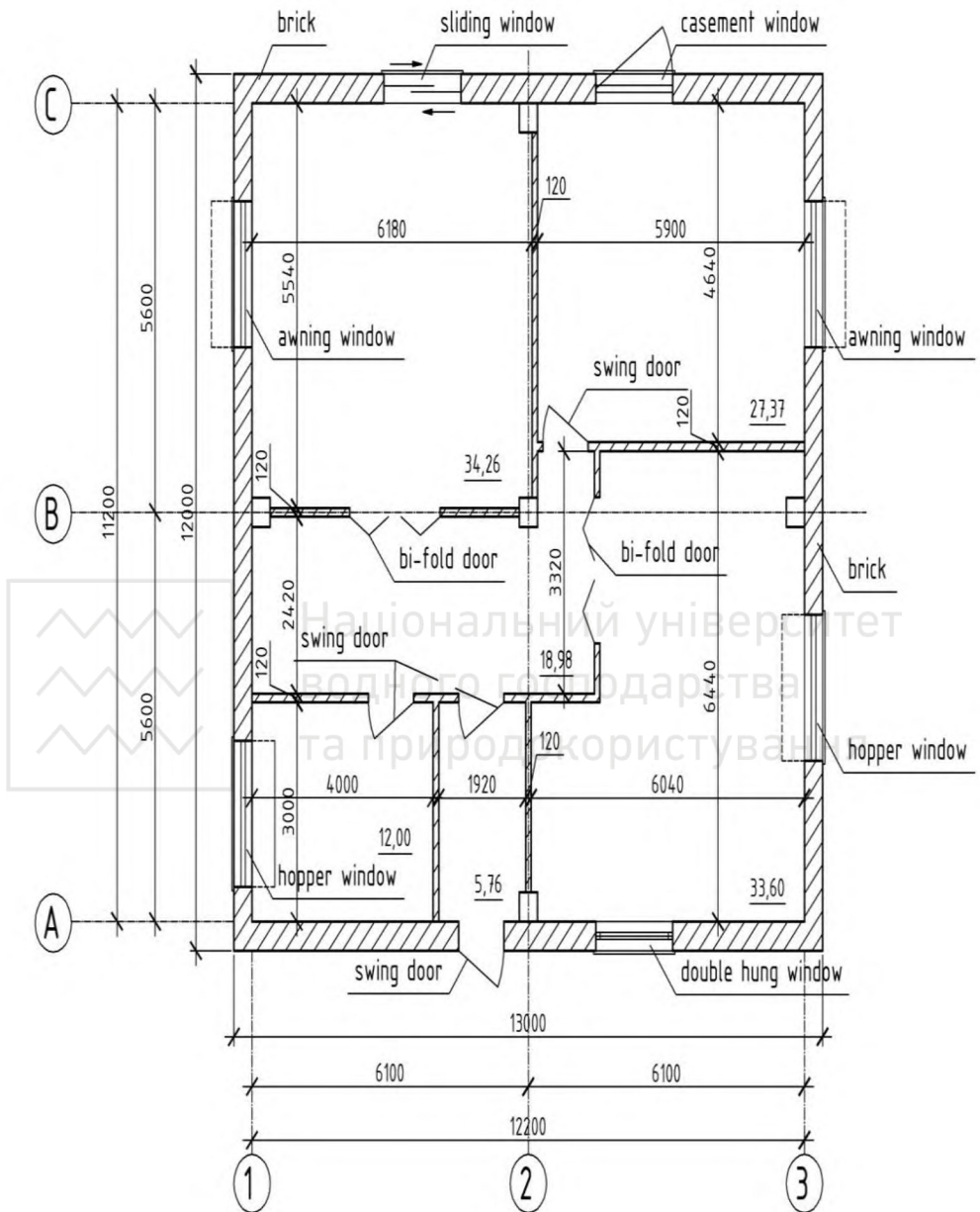


SUPPLEMENT 3

Samples of typical layouts of a construction project



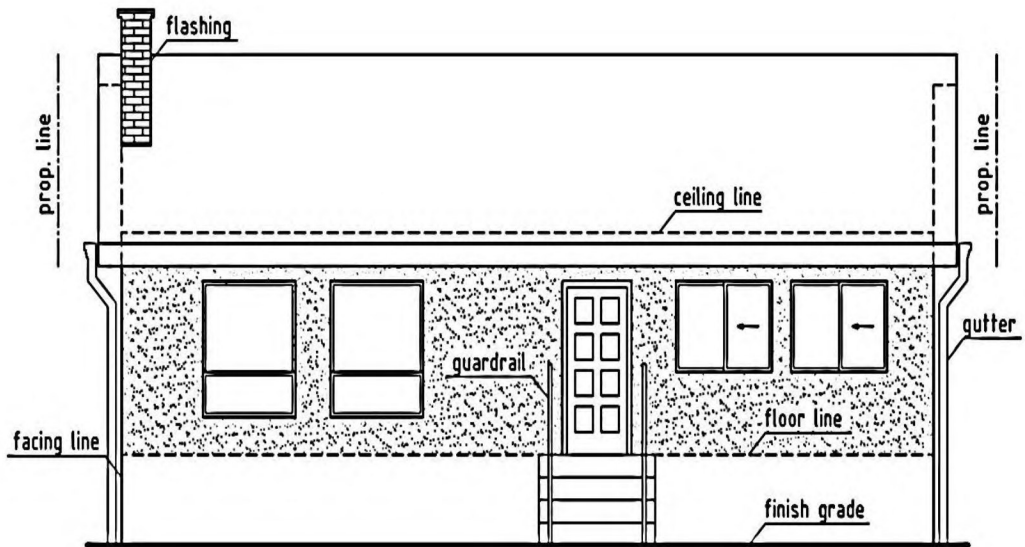
Plot plan



Floor plan



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Elevation



Making Presentations: Key Points

This paper has been divided into 5 sections

The following checklist is a guide for your preparation.

1. Thinking About You're Audience

Determine the level of understanding

What are their expectations:

Ask around

2. Preparing your Presentation

Draw up a plan, with time limits, and identify objectives (max. of 3)

Be creative – brainstorm and mindmap

KISS: keep it short and simple

Use a variety of visual aids – but not too many

Know your room and equipment

3. Overcoming Nerves

Rehearse beforehand

Don't have too much material

Practice with equipment

Get perspective, think positive, use relaxation exercises

Be yourself!

4. The Presentation itself

Stand up, move around, establish eye contact

Don't be note-bound

Avoid fillers, runaways and apologies

Make it 3D

Project your voice

5. Questions

If it's a long presentation, make it interactive

Anticipate questions and formulate answers beforehand

Don't gather up notes and lose concentration

Ask for clarification if confused, repeat it for benefit of whole audience

Provide short and sharp answers

Speak to entire audience and not one questioner



Giving an Oral Presentation

Sub-skills	Functions	Recommended exponents
Introducing a presentation	Creating and introducing oneself	Good morning/afternoon. My name 's .../I am ... Let me introduce myself. Let me start by saying a few words about
General professional environment and routine	Presenting the title/subject	The subject of my presentation is ... The focus of my paper (academic) is ... Today I'd like to talk about... I'm going to tell you something about...
	Specifying the purpose/objective	We are here today to decide/ agree/learn about ... The purpose of the talk/ presentation is ... The talk /presentation is designed to ...
	Signposting the presentation	My presentation will be in ... parts. First/ Firstly/ First of all, I'll give you Second/secondly/Next/Then, ... Lastly/finally last of all.... I've divided my presentation into ... parts/sections. They are I'll be developing ... main points. The first point will Second Lastly
Sequencing and linking ideas	Sequencing / ordering	Firstly ... , secondly ... , thirdly Then ... next... finally/lastly ... Let's start with ... Let's move /go onto ...



Sub-skills	Functions	Recommended exponents
		Now we come to ... That brings us to ... Let's leave that... That covers ... Let's go back to ... Let me turn now to ...
	Giving reasons/causes	Therefore So, As a result, Consequently. That's why ... This is because of ... This is largely due to ... It could lead to ... It may result in ...
	Contrasting	But On the other hand. ... Although ... In spite of this, ... However, ...
	Comparing	Similarly, In the same way,
	Contradicting	In fact, Actually,
	Highlighting	... in particular, ... especially
	Digressing	By the way, In passing,
	Giving examples	For example, For instance, Such as A good example of this is ... To illustrate this point, ...
	Generalising	Usually Generally



Sub-skills	Functions	Recommended exponents
		As a rule
Involving the audience	Asking rhetorical questions	What's the explanation for this? How can we explain this? How can we do about it? How will this affect ... ? What are the implications for ?
	Referring to the audience	As I'm sure you Know /we'd all agree ... We have all experienced ... You may remember ...
Describing and analysing performance	Describing performance to date	The ... performed well/poorly. The .. has/have shown considerable/slight growth/improvement/decrease...
	Analysing performance	The main explanation for this is ... A particular/one/another reason is ... A key problem is ...
	Describing trends, charts and graphs	There is/has been a slight/dramatic/considerable/significant/moderate decrease/fall/drop/collapse/rise/increase in remain(s)/has remained constant/stable has/have decreased/increased/fallen/risen dramatically/considerably/ /moderately



SUPPLEMENT 5

VOCABULARY

A

adjacent (adj.)	сусідній
area (n.)	площа
accordion door (n.)	двері-гармошка
attic storage	ємність (місткість)
	горища
awning window (n.)	вікно з підвісним відкриттям ступки

B

basement (n.)	цокольний поверх
batt insulation (n.)	огортаюча ізоляція
bay window (n.)	еркер
bifold door (n.)	подвійні двері
blocking (n.)	верхній ряд кладки над карнізом
brick (n.)	цегла
~veneer~	облицювання
~shelf	підпірка
building entrance (n.)	вхід до будівлі
bulk (n.)	корпус будівлі

C

casement window(n.)	створне вікно
ceiling line (n.)	лінія стелі
ceramic (adj.)	керамічний
chord (n)	пояс ферми
closet (n)	гардеробна, убиральня
concrete(n.), (adj.)	бетон, бетонний
~ block	блок
~ masonry unit	стіновий блок
coursing (n.)	ряд кладки
cut stone	тесаний камінь



depressed floor area(n.)	увігнута підлога
design load schedule (n.)	таблиця розрахункового навантаження
door hardware (n.)	фурнітура дверей
door header (n.)	ригель
double acting single door(adj +n.)	двері, які відчиняються в обидві сторони
dwelling unit (n.)	житлова одиниця

D

easement (n.)	підсобне приміщення
elevation indication (n.)	вказівка на фасад
exterior door (n.)	зовнішні двері
exterior stud wall	зовнішня каркасна стіна

E

face (n.)
facing tile (n.)
fascia (n.)

finish grade (n.)	рівень землі після закінчення робіт по благоустрою території
fixed window (n.)	закріплене нерухоме вікно
flashing (n.)	гідроізоляція, фартук (елемент покрівлі)
floor line	лінія підлоги
floor tile(n.)	плитка для підлоги
front wall (adj.+n.)	передня стіна

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F
облицювання
облицювальний камінь
пояс, плаский елемент, який створює на фасаді стрічку

G

glass (n.)	скло
guardrail (n.)	поручень
gutter (n.)	жолоб
gypsum wallboard (n.)	гіпсова стінова плита



hallway (n.)
hopper

interior door (adj.+n.)
interior finish (adj.+n.)
interior wall (adj.+n.)

kitchen (n.)

laundry (n.)
living area (n.)

master bedroom (n.)

nonconforming (adj.)

outlet spacing

planter

plaster (n.)

plywood (n.)

pocket door (n.)
property line (n.)
property gas line (n.)
property sanitary line
(n.)

Н

коридор
вікно з відкидним
відкриттям стулки

І

внутрішні двері
внутрішнє оздоблення
внутрішня стіна

К

кухня

Л

пральня
вітальня

М

спальня господарів

Н

невідповідний

О

інтервал отвору

Р

місце для декоративних
рослин
штукатурка

фанера

приховані розсувні двері
межа землеволодіння
газопровід
санітарна лінія
землеволодіння



property shrub (n.)

rear (adj.)

recreation room (n.)

rubble (n.)

setback (n.)

sheathing (n.)

shop drawing (n.)

side

slate (n.)

sliding door (n.)

sliding window (n.)

storage (n.)

structural steel (adj.+n.)

top chord live (n.+adj.)

veneer (n.)

vented window (n.)

weep hole (n.)

wind rose (n.)

wood (n.)

yard (n.)

zoning chart (n.)

кущ землеволодіння

R

задній

кімната для відпочинку

та ігор

бут, кругляк

S

відступ будівлі

обшивка

робоче креслення

бічний

шифер

розсувні двері

вікно з розсувним

відкриттям стулок

комора

конструкційна сталь

T

тимчасове навантаження
на верхній пояс ферми

V

одношарова фанера,
кладка

вентиляційне вікно

W

отвір у трубі

роза вітрів

деревина

Y

площадка, подвір'я

Z

таблиця зональності



A

Area A region or part of a town, a country, or the world.

Accordion door Door similar to the form of accordion (a musical instrument played by stretching and squeezing with the hands to work a central bellows that blows air over metal reeds, the melody and chords being sounded by buttons or keys).

Attic storage A space available for storing something, in particular space or room inside or partly inside the roof of a building.

Awning window A window with a sheet of canvas or other material stretched on a frame and used to keep the sun or rain off window

B

Basement The floor of a building which is partly or entirely below ground level.

Batt insulation A thick layer of a substance that keeps something warm, especially a building in a form fibreglass used to insulate buildings

Bay window A window projecting out from the wall of a building to form a recess in the room.

Bifold door Double or twofold door.

Brick A small rectangular block typically made of fired or sun-dried clay, used in building.

Brick veneer A vertical facing of brick laid against and fastened to sheathing of a framed wall or tile wall construction.

C

Casement window A window with hinged sash that opens to the side; allows top to bottom.

Ceramic Made of clay and permanently hardened by heat.

Closet A cupboard or wardrobe, especially one tall enough to walk into, a toilet.

Concrete A mixture of cement, sand, and gravel with water.

Coursing A continuous horizontal layer of brick, stone, or other material in a wall

Cut stone A stone cut from a quarry carved for use.



D Design load schedule A table that contains information about load on roof and floors.

Door hardware Implements, and other items used for a door.

Door header Horizontal framing member placed over the rough opening of a door to prevent the weight of a wall or roof from resting on the frame.

Double acting single door A door that is opened at both sides.

Double hung window Venting upper and lower sash in a single frame that slide vertically past one another.

E Exterior door A door that is forming, situated on, or relating to the outside.

Exterior stud wall A wall that is forming, situated on, or relating to the outside, the length of wall with the vertical members to which the wall sheathing and cladding are attached.



F Face The front of a building

Facing tile A thin rectangular slab of baked clay or other material with a finish material used to cover another.

Fascia A board or other flat piece of material covering the ends of rafters or other fittings

Finish grade The surface elevation of the ground.

Fixed window Non-operable window

Flashing A strip of metal used to stop water penetrating the junction of a roof with another surface



G Glass A hard, brittle substance, typically transparent or translucent, made by fusing sand with soda and lime and cooling rapidly. It is used to make windows, drinking containers, and other articles.

Guardrail A railing that is placed along the edge of something such as a staircase so that people can hold onto it or so that they do not fall over the edge.

Gutter A shallow trough fixed beneath the edge of a roof for carrying off rainwater



Gypsum wallboard A board made of plaster with a covering of paper.

H **Hallway** A long passage with doors into rooms on both sides of it.

Hopper A window with sash that swings inward from the top.

I **Interior door** Inner door.

Interior finish Inner wall.

K **Kitchen** A room or area where food is prepared and cooked

L **Laundry** A room in a house, hotel, or institution where clothes and linen can be washed and ironed.

Living area A room in a house for general and informal everyday use.

M **Master bedroom** The largest room for sleeping in.

P **Planter** A decorative container in which plants are grown

Plaster A mortarlike composition used for covering walls and ceilings. Usually made of port-land cement mixed with sand and water.

Plywood Wood that consists of thin layers of wood stuck together.

R **Recreation room** A room in an institution or place of work in which people can relax and play games.

Rubble Piece of rough or undressed stone used in building walls, especially as filling for cavities.

S **Setback** The distance by which a building or part of a building is set back from the property line.

Sheathing Protective casing or covering.

Shop drawing Layout of the construction project.

Slate A flat plate of slate used as roofing material.



Sliding door A door drawn across an aperture on a groove or suspended from a track, rather than turning on hinges.

Structural steel Strong mild steel in shapes suited to construction work.



Top chord live Temporary load on the lower truss.



Veneer A thin decorative covering of fine wood applied to a coarser wood or other material.

Vented window A window with an opening that allows air, gas, or liquid to pass out of.



Weep hole Small hole placed on the exterior of a window or door that allows for water drainage.

Wind rose A diagram showing the relative frequency of wind directions at a place

Wood The hard fibrous material that forms the main substance of the trunk or branches of a tree or shrub



Zoning chart Table with building restrictions as to size, location, and type of structures to be built in specific areas.



SUPPLEMENT 6

Scripts

Unit 1

Task 5. There are the following general characteristics of the construction project: 20'-0'', 30 FT, 2545 S. F., 232, 10 East 18th street New Jersey and detached house, PSF, MPH, 5 A, 1201 S. F., 100 feet, 3'-0'', 36. 720.

Unit 2

There is the wind rose south to north. There are adjacent buildings. They are located to the right and to the left. There are such plot plan components: property lines (property water line, property gas line, property landscaped area). There are rear and side yards. There is a property landscaped area: shrubs and trees. There is a setback near the front yard. There is a new concrete driveway in front of the residence. Property fence is located near the house. The building entrance is shown on the layout.

Unit 3

The residence includes three floors: ground floor, the first floor, the second floor. There are stairs between them. There are single interior doors, opening in between rooms. Each floor has doors, fixed windows. The ground floor plan has a huge garage, double doors, much space and ceramic tile. There are single doors and fixed windows on the first floor. Hardwood is used for rooms and living area. There are single doors and fixed windows on the second floor plan. There are such building materials as hardwood and ceramic tile.

Unit 4

There is a brick veneer in front elevation. There are typical lines for elevation: ceiling line, facing line, property line. There is a finish grade, a guardrail, a flashing. The ground floor has the basement. The first floor consists of a flashing and a guardrail. The second floor has aluminium gutters and a brick coursing.

Unit 5 Consolidation

Ground floor provides with recreation, study and washing. Rooms are connected with single doors and floors – with stairs. First floor provides with recreation, washing and sleep. There are such rooms on the first floor: kitchen, bedroom, living area, closet, bath. There are three bedrooms, one bath, a laundry, a living area and a hallway.



SUPPLEMENT 7

Keys for tasks:

Unit 1 General notes

Task 1. 1. a., 2. a., 3. b., 4. a., 5. c., 6. a., 7. b., 8. a., 9. a., 10. c., 11. a., 12. c., 13. a.

Task 4. 1. T, 2. T, 3. F, 4. T, 5. F, 6. T.

Task 5. 1. b., 2. a., 3. d., 4. e., 5. c.

Unit 1 General characteristics

Task 1. 1. c., 2. a., 3. a., 4. b., 5. b., 6. b., 7. a., 8. a., 9. b., 10. a., 11. b., 12. a.,

13. b., 14. b., 15. b., 16. a.

Task 2. 1. e., 2. a., 3. a., 4. b., 5. g., 6. b., 7. b., 8. g., 9. a., 10. j., 11. i., c., 12. d.

Task 3. Yards – [z], frontages – [iz], areas – [z], spaces – [iz], storages – [iz]

Task 4. Property line, landscaped area, bifold door, wall.

Task 5. Items in zoning chart: 20'-0'' – yard, 30 FT – frontage, 2545 S. F. – lot area,

232 – zone, 10 East 18th street New Jersey – address, detached house – principal use

Items in design load schedule: PSF – top chord live, top chord dead, bottom chord dead, living and sleeping spaces, attic storage; MPH – wind.

Items in building characteristics: 5 A construction type, 1201 S. F. floor area.

Required norms for zoning chart, design load schedule, building characteristics:

100 FT – lot depth, 3'-0'' – side yard, 1224 S. F. – second floor, 36. 720 CU.FT – building volume, 45 PSF – total chord on the roof.

Task 6. Spaces – plural, areas – plural, rear yard – adjective +noun, side yard – adjective+noun, living spaces – adjective+noun, sleeping spaces – adjective+noun, front yard – adjective+noun; noun+noun: side yard, ground floor, floor area, attic storage, use group, building volume, construction type, lot depth, lot width.

Task 7. 1. a., 2. a., 3. b., 4. a., 5. a., 6. a., 7. a., 8. a., 9. b., 10. a., 11. b., 12. b., 13. b., 14. a., 15. a., 16 b., 17. a.

Task 8. 1. F., 2. F., 3. F., 4. T., 5. F., 6. T., 7. T., 8. T., 9. T., 10 T.



Progress check

1. b., 2. b., 3. a., 4. b., 5. a., 6. b., 7. a., 8. a.

Plot plan

Task 1. 1. b., 2. a., 3. d., 4. c., 5. f., 6. e., 7. h., 8. g.

Task 2. 1. c., 2. a., 3. c., 4. b., 5. a., 6. c., 7. a., 8. a., 9. c., 10. a.

Task 3. 1. b., 2. i., 3. d., 4. b., 5. e., 6. b., 7. d., 8. f., 9. h., 10. d.

Task 4. a.

Task 5. Building's foundation – possessive case, elements – plural, circumstances – plural.

Task 6. Building's foundation – s, circumstances – iz, elements – s, walls – z.

Task 7. 1. rule 2; 2. rule 1; 3. rule 4; 4. rule 1.; 5. rule 3.

Task 8. A bifold door.

Task 9. Property line, wind rose, adjacent building, design load schedule, plot plan, property shrub, point of beginning.

Task 10. World side: south, north; plot plan in connection with the road: adjacent building; location with adjacent buildings: adjacent buildings to the right and to the left from the residence; components of plot plan: shrubs, trees, setback, front yard, concrete driveway, property fence, building entrance.

Task 12. Building's setback – z, yards – z, planters – z, trees – z.

Task 13. 1. a., 2. a., 3. b. 1a imperative sentence; 2a – sentence with the modal verb shall, 3. b. – infinitive sentence; 4. b. – sentence with the modal verb shall.

Task 14. 1, 2, 6, 8, 13.

Task 15. 1. Go to protect adjacent building's foundation against the elements.

2. Under no circumstances shall the existing footing be undermined.

3. Driveway ditches to have disposal water.

4. Concrete area shall be around the building.

Task 16. 1. a. image 1; 2. b. image 2; 3. c. image 3.

Task 17. Planter, landscaped area, wind rose, concrete paved area.

Progress check

1. b., 2. b., 3 b.



Floor plan

Task 1. 1. b., 2. a., 3. d., 4. c., 5. h., 6. e., 7. g., 8. h., 9. k., 10 i., 11. j., 12. m., 13. l., 14. o., 15. n., 16. q., 17. p., 18. j., 19. r.

Building materials

1. b., 2. a., 3. d., 4. c., 5. f., 6. e., 7. h., 8. g., 9. j., 10. i., 11. l., 12. k., 13. o., 14. m.

Wall schedule

1. c., 2. d., 3. a., 4. b., 5. f., 6. e., 7. h., 8. g., 9. j., 10. i.

Notes

1. d., 2.c.,3 b., 4.e.

Task 2. Components of floor plan 1. a., 2. b., 3. b., 4. a., 5. b., 6. c., 7. a., 8. c., 9. c., 10. a., 11. a., 12. a., 13. b. 14. a., 15 c., 16. a., 17. b.

Building materials 1. a., 2. a., 3. c., 4. b., 5. a., 6. b., 7. b., 8. b., 9. a., 10. c., 11. a., 12. a., 13. b., 14. a., 15. a., 16. b.

Names of rooms 1. a., 2. c., 3. b., 4. a., 5. a., 6. c., 7. a., 8. b., 9. a., 10. a., 11 c., 12. a., 13. c., 14. a., 15. b.

Task 3. Window: fixed window, awning window, hopper, casement; door: bifold door, single, double, exterior; facing tile

Task 4. a.

Task 5. 1. rule 1; 2. rule 3.; 3. rule 3; 4. rule 2.

Task 6. Sliding door, bifold door, single door, vented window.

Task 7 Ground floor: stairs; how rooms are connected: single, interior, opening in doors; general look of each floor: doors, fixed windows; peculiarities of each floor: ground floor (huge garage, double doors, much space, ceramic tile), first floor (single doors, fixed windows, hardwood), second floor (single doors, fixed windows, hardwood, ceramic tile)

Task 9. Plural: walls; noun+adjective: exterior walls, siding color, exterior wall, interior wall; noun+noun: CMU wall, brickshelf, stud wall, brick veneer, air space.

Task 10. 1. imperative sentence a; 2. sentence with the modal verb shall a; 3. Sentence with the modal verb shall.

Task 11. 3.

Task 12. 1. a., 2. b.

Task 13. 1. All door and window headers shall be plywood filler. 2. Exterior walls to use gypsum wall board inside. 3. Provide min. air space between brick veneer and sheathing.



Task 14. 1. 2. e., 1. 3. g., 2.1. h, 2.2. i, 2.3. c.

Task 15. Single window, single door, double window.

Progress check

1. a., 2. b, 3. b.

Elevation

Task 1. 1. b., 2. a., 3. d., 4. c., 5. f., 6. g., 7. i., 8. e., 9. h., 10 k., 11. j., 12. n., 13. l., 14 m. , 15. o

Task 2. 1. a., 2. a., 3. b., 4. a., 5. c., 6. a., 7. a., 8. c., 9. b., 10. a.

Task 3. 1. b, c.; 2. d., 3. e., 4. e., 5. e.

Task 4. a.

Task 5. Property line, finish grade, floor line, flashing, fascia, brick coursing, guardrail, brick veneer.

Task 6. Vented window, finish grade, casement window, exterior door, property line, brick coursing, guardrail.

Task 7. General look of floors: brick veneer, ceiling line, floor line, facing line, property line, finish grade, guardrail, flashing; peculiarities of each floor: ground floor (basement), first floor (flashing, guardrail); second floor (aluminium gutters, brick coursing).

Task 9. Gutter, guardrail, exterior door, floor line, ceiling line, fascia, finish grade, basement.

Progress check

1. a., 2. a., 3. a., 4. b., 5. b., 6. b., 7. b.

Consolidation

Task 1.

1. Yard, design load schedule, top chord live, attic storage, bottom chord dead, floor area, parking space, bulk, bifold door, double hung window, fixed window, elevation indication, stairs, plywood, garage, hallway, powdery room, gypsum wallboard, exterior stud wall, door hardware, property line, planter, property shrub, wind rose, gutter, finish grade, floor line, ceiling line, guardrail, property line.

2. Ground floor: connection with other floors and rooms on its floor (stairs, doors); first floor (to provide with recreation, washing, sleeping), connection with other floors and rooms on its floor (stairs, doors); second floor rooms (three bedrooms, one bath, a laundry, a living area, a hallway), connection with other floors and rooms on its floor (stairs, doors).



Task 2. 1. General characteristics: guardrail, gutter, wall, elevation reference; plot plan: bifold door, floor area; floor plan: planter, frontage, dwelling unit, parking space; elevation: nonconforming, property shrub.

2. Facts that environmentally friendly building materials are used for the construction project: CMU wall (central monolithic unit), brick; partial coincidence (proposed lot area 2545 S. F., required 3000 S. F.-proposed lot depth 101. 27 FT, required 3000 S. F., minimum rear yard 20'-0''- proposed 20'-5'', proposed side yard 3'-1'' 6'-2''-required side yard 3'-0'', 6'-0'', 3 parking spaces proposed-required 1-1/2 spaces.; several typed of doors and windows: double and single doors, fixed windows on the first and second floors.

Task 3. Areas, lots, yard, parking spaces, floor areas, building volume, spaces; first floor plan: living area, bedrooms, master bedroom. Go to protect adjacent building's foundation against the elements and brace the existing wall. Under no circumstances undermine the existing footing. This plot plan is based on a survey. Concrete paved area shall be around the building. Driveway ditches to have disposal water. All exterior walls to use gypsum board inside, All exterior walls shall be wall type C. Provide wall blocking at all millwork. Fill in depressed floor areas with concrete floor fill. Wrap around all arch, fire rated wall with gypsum board.

Zoning chart (reason 2); building characteristics (reason 2); design load schedule (reason 2), general notes (reason 2), plot plan (reason 1), floor plan (reason 1)

Progress check

1. a., 2. a., 3. 1. b., 3. 2. b. 4. b., 5. b.



SUPPLEMENT 8

List of web links for a construction project

1. <http://www.dailymotion.com/video/x2kjuej>
2. <http://www.youtube.com/watch?v=9Ht2K14wSes>
3. <http://www.youtube.com/watch?v=VYiVjVulnm4>
4. <http://www.youtube.com/watch?v=SXcKWF4zFB0>
5. <http://www.youtube.com/watch?v=mUppsCeBwhE>
6. <http://www.youtube.com/watch?v=kVJzTHaXBII>
7. <http://www.youtube.com/watch?v=x2tINFC5JEQ>
8. <http://www.youtube.com/watch?v=u3HUMgxk6X0>
9. http://www.dailymotion.com/video/x26roj_q_world-s-top-
10. <http://www.youtube.com/watch?v=p1nTeN8SDD4>
11. <http://www.youtube.com/watch?v=p1nTeN8SDD4>
12. <http://www.youtube.com/watch?v=0B8bD99Mmaw>





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8. Internet site: www.cambridge.org/elt/englishforengineering
9. Internet site: <https://web.dsbu.edu.on.ca>