

**BIM PROJECT EXECUTION PLAN**

*FOR*

**IZMIR INTEGRATED HEALTH CAMPUS PROJECT**

**INTENSIVE CARE UNITS (ICU) BIM EXECUTION PLAN**

*DEVELOPED BY*

**GROUP İZMİR ÜÇLÜSÜ (IZU)**

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# **SECTION A: BIM PROJECT EXECUTION PLAN OVERVIEW**

To successfully implement Building Information Modeling (BIM) on a project, the project team has developed this detailed BIM Project Execution Plan. The BIM Project Execution Plan defines uses for BIM on the project (e.g. design authoring, cost estimating, and design coordination), along with a detailed design of the process for executing BIM throughout the project lifecycle.

# **SECTION B: PROJECT INFORMATION**

1. **PROJECT OWNER**

*İstanbul Teknik Üniversitesi IYB501*

1. **PROJECT NAME**

*IZMIR BAYRAKLI INTEGRATED HEALTH CAMPUS PROJECT*

*INTENSIVE CARE UNITS (ICU)*

1. **PROJECT LOCATION AND ADDRESS:**

*İzmir Bayraklı Entegre Sağlık Kampüsü, Refik Şevket İnce Mahallesi 2148/11 Sokak, No:1/11 Bayraklı İZMİR*

1. **CONTRACT TYPE / DELIVERY METHOD:**

*Public Private Partnership, Build Operate Transfer Delivery Method*

1. **BRIEF PROJECT DESCRIPTION:**

*- Total Construction Area: (Y12-Y18 – X39-X44) 1920 m² in 631,320 m²*

*- In Main Hospital Building, MT2 block 4th – 5th floor*

* *Intensive Care Units: 18*

1. **ADDITIONAL PROJECT INFORMATION:**

*Developing and coordinating the static, architectural, electrical and HVAC BIM models of the area between X39-X44 - Y12-Y18 axes on the 4th and 5th floors where the Intensive Care Units are located in the MT2 block of the Main Hospital building.*

1. **PROJECT NUMBERS:**

|  |  |
| --- | --- |
| **PROJECT INFORMATION** | **NUMBER** |
| CONTRACT NUMBER | 1 |
| TASK ORDER | 1 |
| PROJECT NUMBER | 1 |

1. **PROJECT SCHEDULE / PHASES / MILESTONES:**

|  |  |  |  |
| --- | --- | --- | --- |
| **PROJECT PHASE / MILESTONE** | **ESTIMATED START DATE** | **ESTIMATED COMPLETION DATE** | **PROJECT STAKEHOLDERS INVOLVED** |
| PRELIMINARY PLANNING | 26.10.2022 | 02.11.2022 |  |
| DESIGN DOCUMENTS | 01.11.2022 | 12.11.2022 |  |
| CLASHING DETECTION | 12.11.2022 | 20.11.2022 |  |
| DESIGN REVIEW | 21.11.2022 | 05.12.2022 | 07.12.2022 |

# **SECTION C: KEY PROJECT CONTACTS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ROLE** | **ORGANIZATION** | **CONTACT NAME** | **LOCATION** | **E-MAIL** | **PHONE** |
| Project Manager(s) | İzmir Üçlüsü | M. Selim Soysal | İzmir | [SOYSAL22@ITU.EDU.TR](mailto:SOYSAL22@ITU.EDU.TR) | +905555153180 |
| BIM Manager(s) | İzmir Üçlüsü | Ali Erişir | İstanbul | [ERISIR22@ITU.EDU.TR](mailto:ERISIR22@ITU.EDU.TR) | +905078773866 |
| Discipline Leads | İzmir Üçlüsü | Eray Uzun | İzmir | [UZUNE22@ITU.EDU.TR](mailto:UZUNE22@ITU.EDU.TR) | +905557695797 |
| Other Project Roles | İzmir Üçlüsü | Uğurcan Çakal | İzmir | [CAKAL22@ITU.EDU.TR](mailto:CAKAL22@ITU.EDU.TR) | +905303009556 |

# **SECTION D: PROJECT GOALS / BIM USES**

1. **MAJOR BIM GOALS / OBJECTIVE:**

|  |  |  |
| --- | --- | --- |
| **PRIORITY** | **GOAL DESCRIPTION** | **POTENTIAL BIM USES** |
|  | Determining the scope of the project, preparing the work plan and assigning tasks. | PROGRAMMING |
|  | Creation of BIM models | DESIGN AUTHORING |
|  | Clash detection | 3D COORDINATION |
|  | Scheduling and budgeting studies with the quantities obtained from the BIM model, creating a 4D model. | PHASE PLANNING  (4D MODELING) and COST ESTIMATION |

1. **BIM USE ANALYSIS WORKSHEET: ATTACHMENT 1**
2. **BIM USES:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **X** | **PLAN** | **X** | **DESIGN** | **X** | **CONSTRUCT** | **X** | **OPERATE** |
| X | PROGRAMMING | X | DESIGN AUTHORING |  | SITE UTILIZATION PLANNING |  | BUILDING MAINTENANCE SCHEDULING |
|  | SITE ANALYSIS | X | DESIGN REVIEWS |  | CONSTRUCTION SYSTEM DESIGN |  | BUILDING SYSTEM ANALYSIS |
|  |  | X | 3D COORDINATION |  | 3D COORDINATION |  | ASSET MANAGEMENT |
|  |  |  | STRUCTURAL ANALYSIS |  | DIGITAL FABRICATION |  | SPACE MANAGEMENT / TRACKING |
|  |  |  | LIGHTING ANALYSIS |  | 3D CONTROL AND PLANNING |  | DISASTER PLANNING |
|  |  |  | ENERGY ANALYSIS |  | RECORD MODELING |  | RECORD MODELING |
|  |  |  | MECHANICAL ANALYSIS |  |  |  |  |
|  |  |  | OTHER ENG. ANALYSIS |  |  |  |  |
|  |  |  | SUSTAINABLITY (LEED) EVALUATION |  |  |  |  |
|  |  |  | CODE VALIDATION |  |  |  |  |
|  | PHASE PLANNING  (4D MODELING) | X | PHASE PLANNING  (4D MODELING) |  | PHASE PLANNING  (4D MODELING) |  | PHASE PLANNING  (4D MODELING) |
|  | COST ESTIMATION | X | COST ESTIMATION |  | COST ESTIMATION |  | COST ESTIMATION |
|  | EXISTING CONDITIONS MODELING |  | EXISTING CONDITIONS MODELING |  | EXISTING CONDITIONS MODELING |  | EXISTING CONDITIONS MODELING |

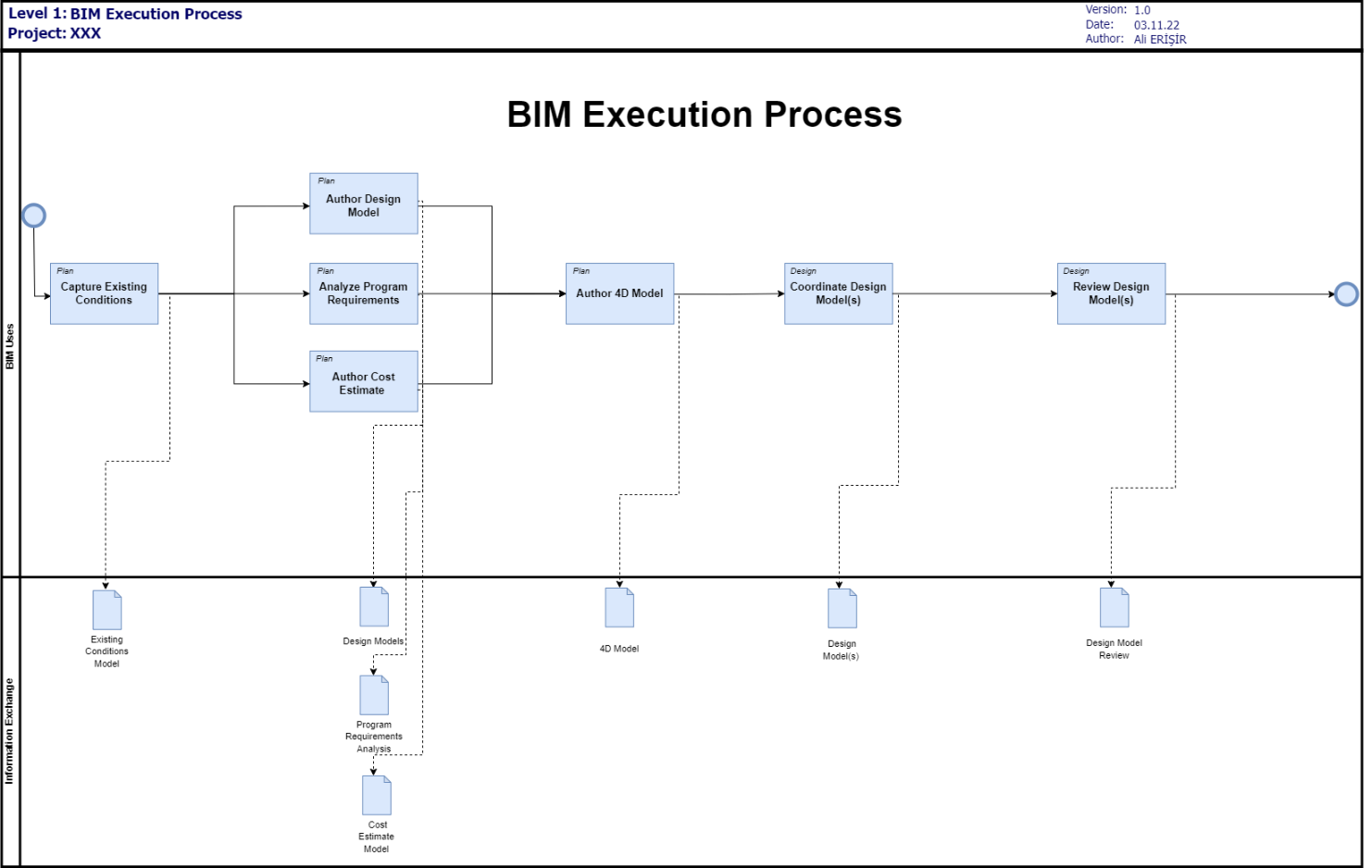
# **SECTION E: ORGANIZATIONAL ROLES / STAFFING**

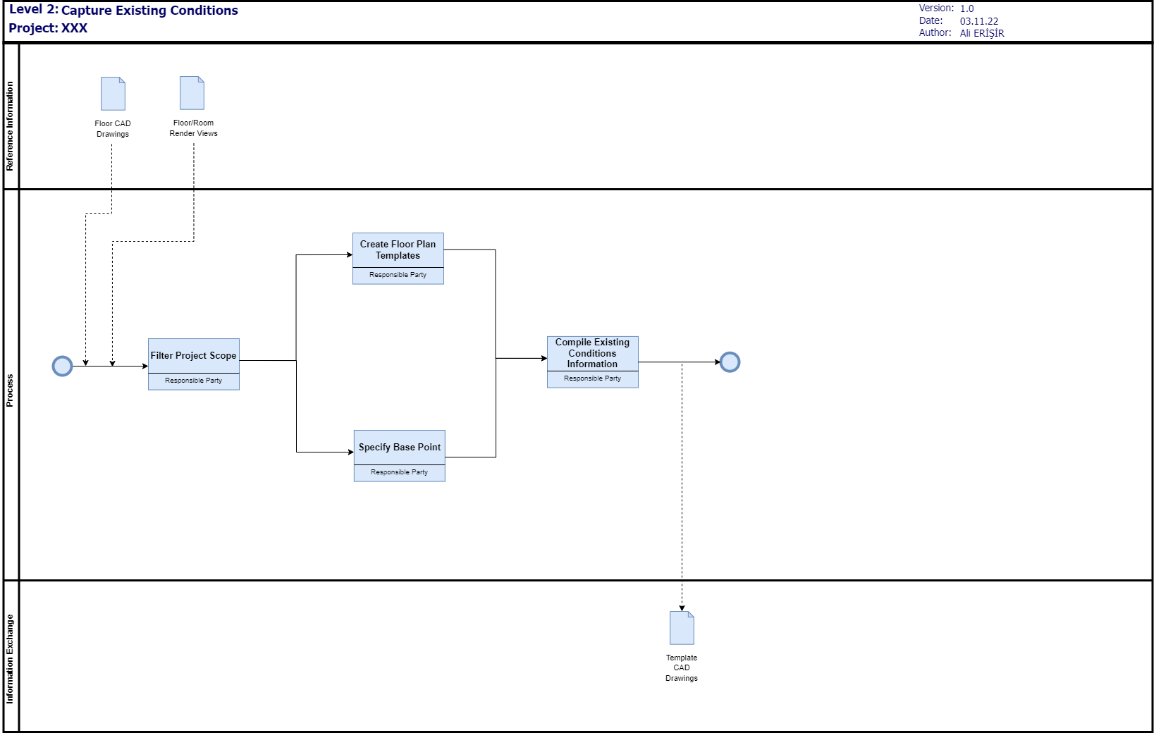
1. **BIM ROLES AND RESPONSIBILITIES:**
2. **BIM USE STAFFING:**

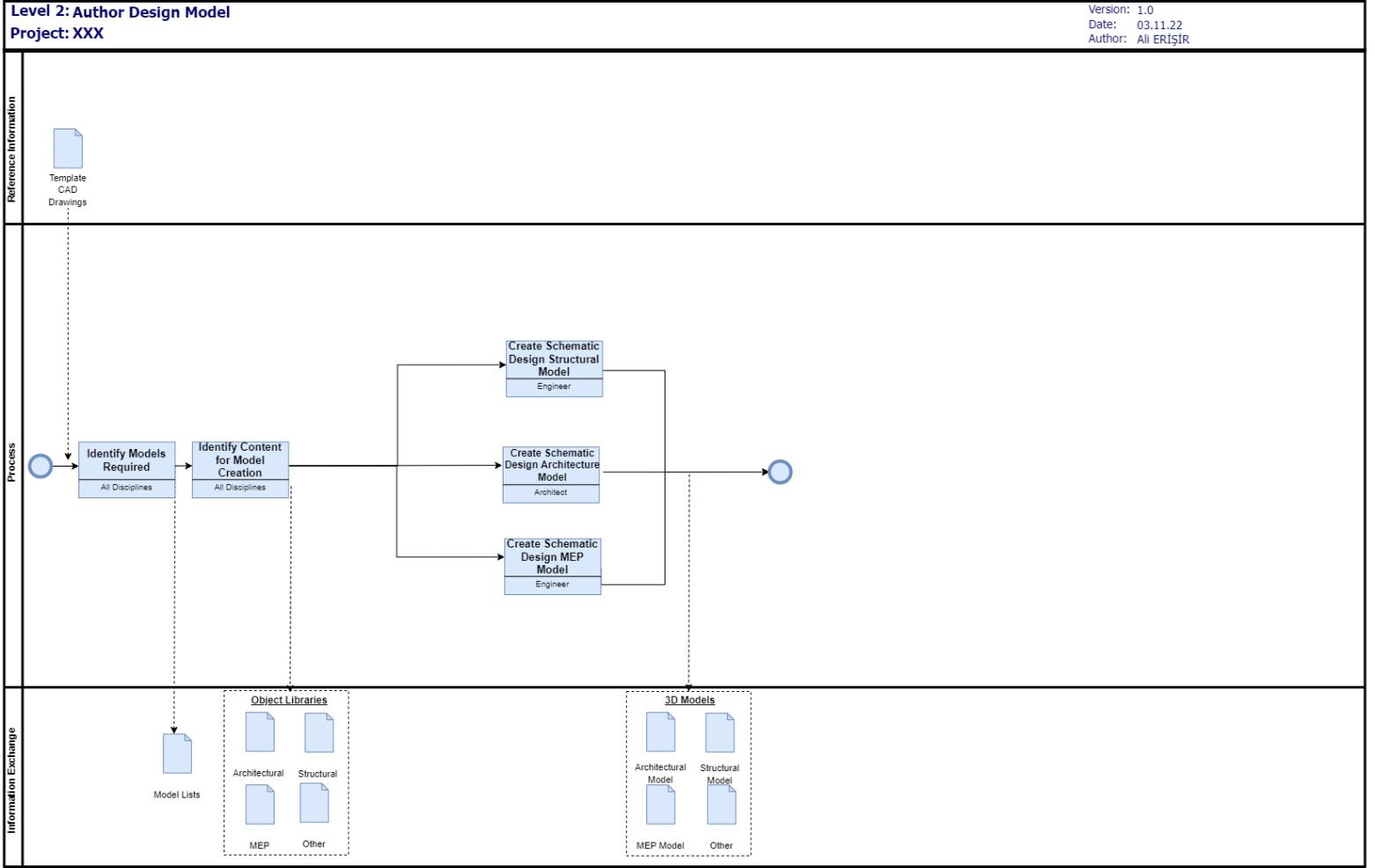
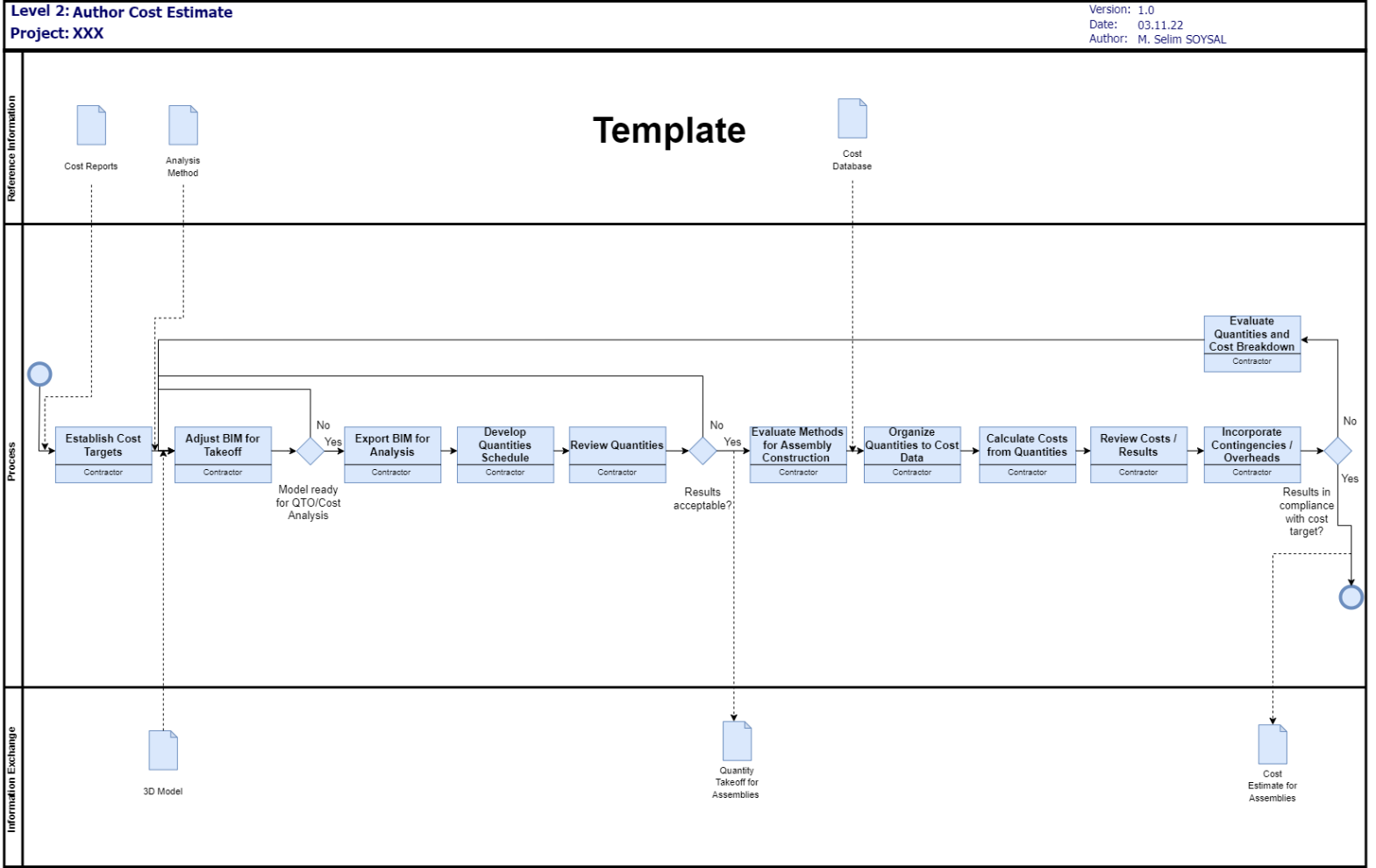
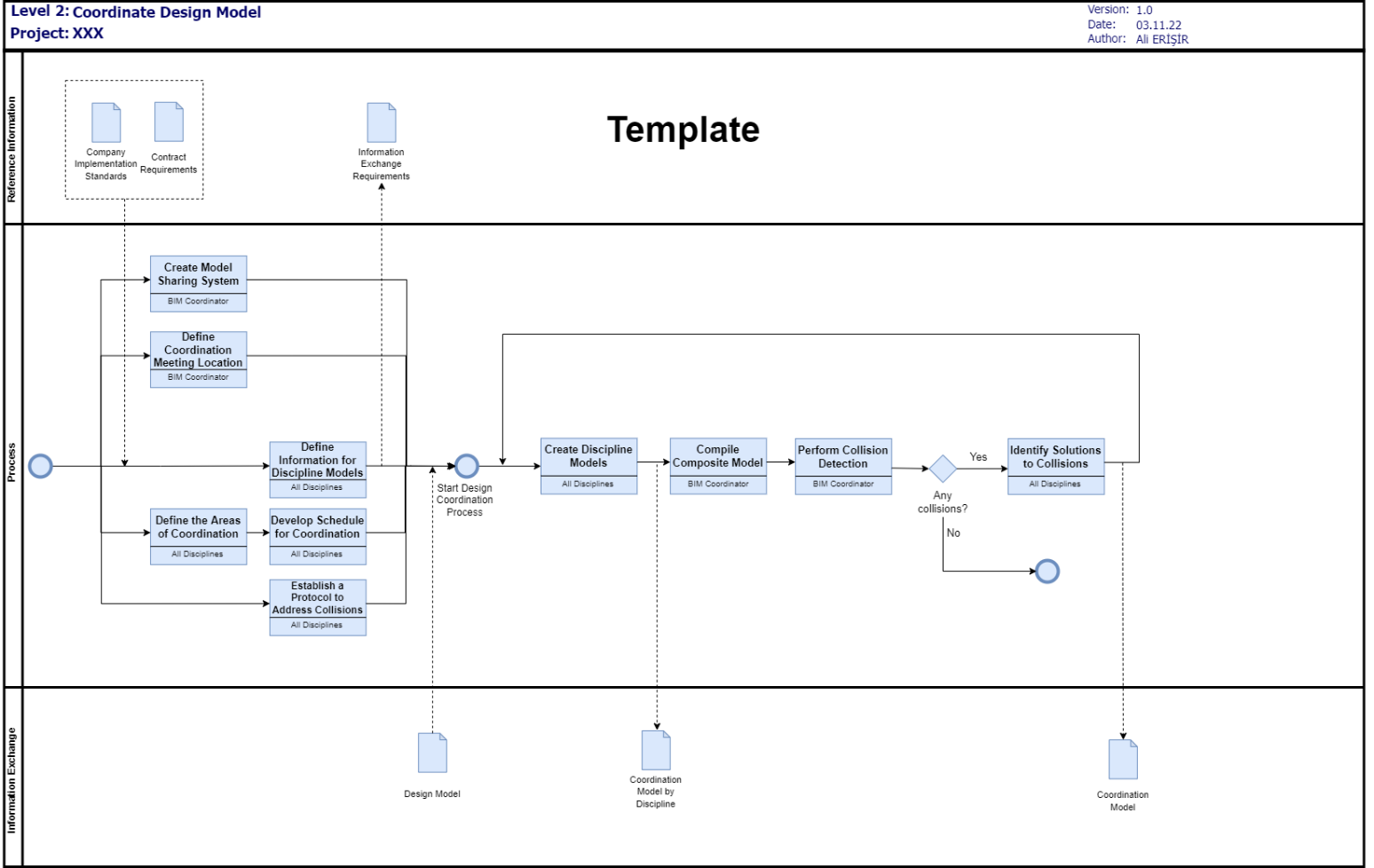
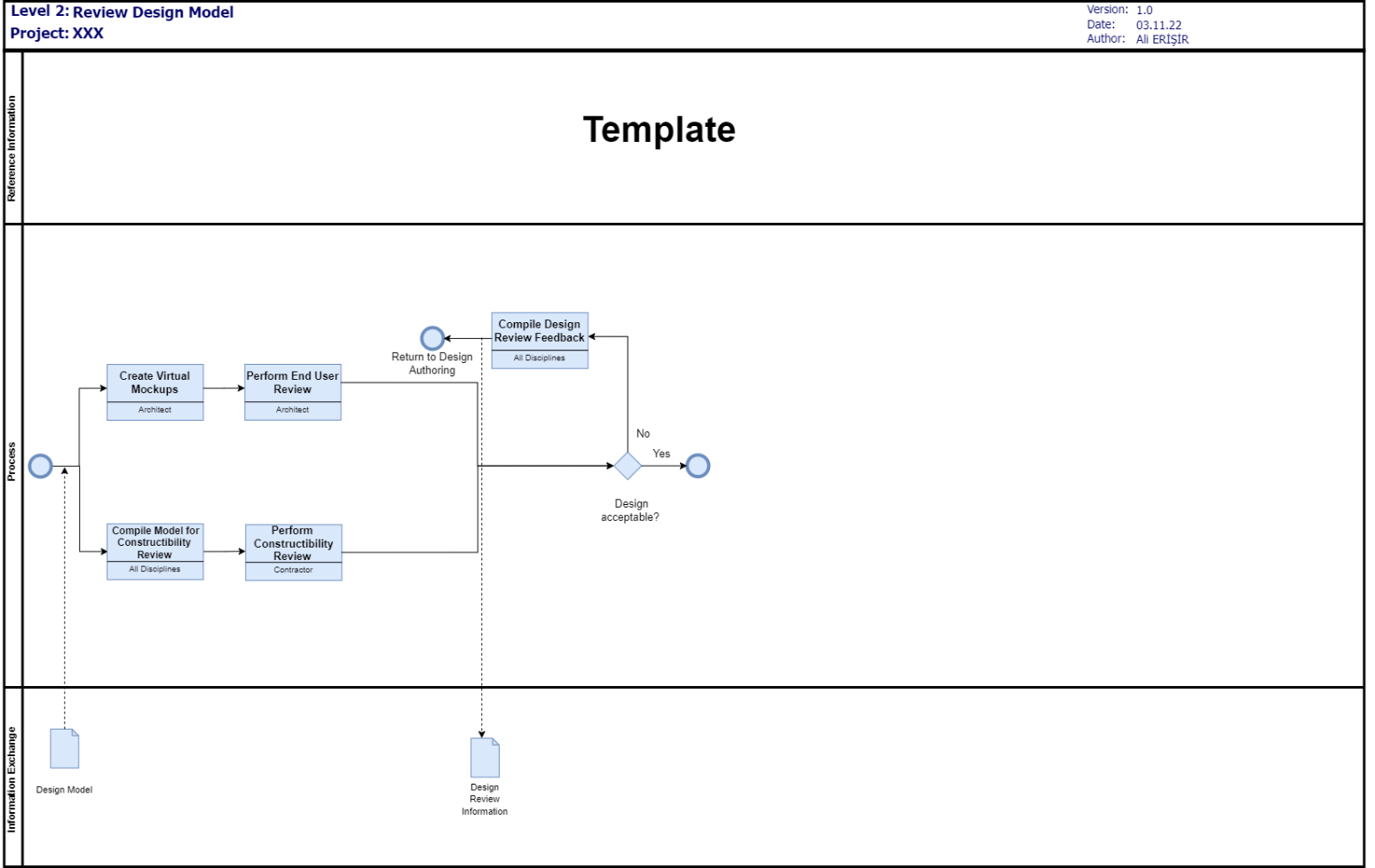
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BIM USE** | **ORGANIZATION** | **NUMBER OF TOTAL STAFF FOR BIM USE** | **ESTIMATED WORKER HOURS** | **LOCATION(S)** | **LEAD CONTACT** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

# **SECTION F: BIM PROCESS DESIGN**

1. **LEVEL ONE PROCESS OVERVIEW MAP: ATTACHMENT 2**



1. **LIST OF LEVEL TWO – DETAILED BIM USE PROCESS MAP(S): ATTACHMENT 3**

# **SECTION G: BIM INFORMATION EXCHANGES**

1. **LIST OF INFORMATION EXCHANGE WORKSHEET(S): ATTACHMENT 4**
2. **MODEL DEFINITION WORKSHEET: ATTACHMENT 5**

# **SECTION H: BIM AND FACILITY DATA REQUIREMENTS**

# **SECTION I: COLLABORATION PROCEDURES**

1. **COLLABORATION STRATEGY:** Disiplinler altındaki her bir modelden bir kişi sorumlu olacak şekilde atanarak ilgili disiplin dosyasında oluşturulur. Düzenli toplantılarda bu modeller disiplinler altında birleştirilir. GITHUB üzerinden paylaşılan dosyalar en az başka bir kişinin onayına bağlı olarak sisteme kontrollü şekilde yüklenir ve çalışma alanında linklenmeye hazır halde dosyalanır.

Only one person is assigned to be responsible for each model under the disciplines and created in the relevant discipline file. At regular meetings, these models are combined under disciplines. The files shared via GITHUB are uploaded to the system in a controlled manner, subject to the approval of at least one other person, and filed in the workspace ready to be linked.

1. **MEETING PROCEDURES:** Toplantı günleri pazar, pazartesi ve perşembe olacak. Süresi 1 saati geçmeyecek. İçeriği ortaya çıkmış problemlerin çözümleri, ortak alınması gereken kararların neticelendirilmesi ve izlenecek yolun belirlenmesi olarak sınırlandırıldı. Her toplantı tutanağı yayımlanacak.

*The meeting days will be Sunday, Monday and Thursday. The duration will not exceed 1 hour. The content is limited to the solutions of the problems that have arisen, the finalization of the decisions that need to be taken jointly and the determination of the path to be followed. Minutes of each meeting will be published.*

1. **MODEL DELIVERY SCHEDULE OF INFORMATION EXCHANGE FOR SUBMISSION AND APPROVAL:**
2. **INTERACTIVE WORKSPACE: GitHub.com**
3. **ELECTRONIC COMMUNICATION PROCEDURES:**

# **SECTION J: QUALITY CONTROL**

1. **OVERALL STRATEGY FOR QUALITY CONTROL: Base point, Standartlar korunacak. (LOD)**
2. **QUALITY CONTROL CHECKS:**
3. **MODEL ACCURACY AND TOLERANCES:**

# **SECTION K: TECHNOLOGICAL INFRASTRUCTURE NEEDS**

1. **SOFTWARE:**
2. **COMPUTERS / HARDWARE:**
3. **MODELING CONTENT AND REFERENCE INFORMATION**

# **SECTION L: MODEL STRUCTURE**

1. **FILE NAMING STRUCTURE:**
2. **MODEL STRUCTURE:**
3. **MEASUREMENT AND COORDINATE SYSTEMS:**
4. **BIM AND CAD STANDARDS:**

# **SECTION M: PROJECT DELIVERABLES**

# **SECTION N: DELIVERY STRATEGY / CONTRACT**

1. **DELIVERY AND CONTRACTING STRATEGY FOR THE PROJECT:**
2. **TEAM SELECTION PROCEDURE:**
3. **BIM CONTRACTING PROCEDURE:**

# **SECTION O: ATTACHMENTS**

1. BIM USE SELECTION WORKSHEET [FROM SECTION D]
2. LEVEL 1 PROCESS OVERVIEW MAP [FROM SECTION F]
3. LEVEL 2 DETAILED BIM USE PROCESS MAP(S) [FROM SECTION F]
4. INFORMATION EXCHANGE REQUIREMENT WORKSHEET(S) [FROM SECTION G]
5. MODEL DEFINITION WORKSHEET [FROM SECTION G]
6. DEVELOPED DOCUMENTS / CONTRACTS [FROM SECTION H]