A Report for

City of San Antonio Development Services Department

"To-Be" Use Cases

Land, Permit, Inspection, License, Violation Management Systems Replacement

7 May 2014

Engagement: 330017999

Gartner

Table of Contents

1.0 Use Cases

1.1 Intake & Customer Service Use Cases

The Hansen-ECCO Replacement System will allow users to interact with an online portal to find the answers to frequently asked questions, as well as self-service functionality.

This set of Use Cases assist Applicants and City Employees with the researching city services, applying for a service, submitting required documents, and the intake of those applications and documents. This set of use cases also allows for the completion of administrative tasks required to support the permitting and licensing process, including managing accounts, providing general customer assistance, managing addresses, etc.

1.1.1 Use Case: Select a Service

Actor:

Applicant

Purpose and Objectives:

The goal of the New Permitting and Electronic Plan Review System (or "System") is to offer Licensing and Permitting Services to the City's customers through a single online portal (One-Stop-Shop). To this end, the System seeks to shift the request of services from the *department level*, where Applicants must shepherd applications through the process by interacting with individual departments directly, to provisioning services at a *City level*. These higher level services encapsulate the permit and license processing scenarios that may span multiple departments. The System shall center on meaningful business services and the technology to achieve this will be built around efficient business processes from a customer perspective, while at the same time enabling process improvement on the backend through coordinated hand-offs between City departments processing the applications.

Interdepartmental services provide greater transparency and predictability. They will enable Applicants to have a better up-front perspective of the various steps involved in a service, expected durations and fees, and an anticipation of what will be required from the Applicant throughout the process.

The initial step of Applicants interacting with the System is to determine the appropriate service that meets their needs. For simple processes, this may be as simple as selecting "I want to…" from a list of predefined customer-centric service definitions. In more complicated cases, the system would assist the user through a structured process (e.g., "wizard style") to propose the applicable service for the building project.

Once the service has been selected, the System presents an overview of the steps involved in processing the request for service. This overview will include a list of specific types of review and clearances, departments involved, estimated duration of the process and expected fees. This should include the capability to address typical "gotchas" that might complicate the process for the selected service based on the application context so the Applicant is better prepared and will have fewer surprises down the road.

Trigger Events:

- The Applicant has a need to register a business, obtain a City permit, license, or other service and would like to initiate the process online

Precondition:

- The System has, or is integrated with, a robust online portal that is pre-populated and configured with business rules governing all available services, list of specific types of review and clearances, departments involved, estimated duration of the process and expected fees for the various services for which an Applicant can apply.

Post Condition:

- An Applicant has selected a service and is ready to initiate an application in the System.

Use Case Flow:

1. The Applicant connects to the online portal, either anonymously or as a registered user, and selects the option to determine the appropriate service for the Applicant's project.
2. The system presents a list of common services, described from the customer's perspective ("I want to…) including but not limited to the following:
    a. Manage My Project(s)
        i. Check Application or Project Status
        ii. View Project Information / History
        iii. Request an Inspection
        iv. Communicate with City Resources (e.g., Subject Expert or Project Contact(s) within the City)
        v. Modify my Application Request/Project/Permit
        vi. Request Review of Issue
    b. Start a New Project
        i. Complete Online Application
        ii. Submit Plans or other Required Supporting Documentation (i.e. Fee Receipt/ Permit)
    c. Financial Transactions
        i. Pay My Bill
        ii. Identify Fee Due
        iii. Submit Payment
        iv. View Payment History
        v. Request Refund
        vi. Request Receipt
    d. Register or Renew a License
        i. Upload Copy of State License or other supporting documentation
        ii. Complete Online Registration/Renewal Forms
    e. Report a Violation / Complaint
    f. Obtain General Information (e.g., "Contact Us")
        i. Links to other related agencies' websites (e.g., CPS)

            ii. Review GIS Maps/GEO Validation
            iii. Address Jurisdiction Validation
            iv. Senior Homestead Exemption
            v. Research Property History
            vi. Research Location Business Type
            vii. Submit Contact Us Request
    g. Manage My Profile
            i. Contact Info
            ii. Escrow Account and Other Payment Information

3. If the Applicant cannot determine the service from the list, the System shall assist the user to recommend the appropriate service.
    a. The System shall present a structured and guided series of questions that reflect a predetermined dynamic decision tree to assist the user with the selection process. Key questions may include but are not limited to:
        i. "Are you planning a construction project?"
        ii. "Is your project of residential or commercial nature?"
        iii. "Are you performing work above ground or below ground?"
        iv. "Are you planning on working on private property, public ROW, or both?"
        v. "Are you planning on installing or modifying signage?"
4. The Applicant provides specific information based on the questions.
5. The System shall present one or multiple recommended services or options to interact with the City.
6. The Applicant selects a service or confirms recommended service(s).
7. The System shall prompt the user to select the physical location related to his or her application or project (i.e. location of commercial business or organization, location of construction project) by providing information including but not limited to the following examples:
    a. Address/Location-based validity:
        i. Input a parcel/address by searching for:
        ii. Address (including suite, unit number, legal description)
        iii. Owner
        iv. Intersection (streets, cross-streets)
    b. Select a parcel/address by map through GIS integration
        i. Include street segment / boundaries
8. Based on the location, the System shall retrieve pertinent information from the System that informs the service process, including but not limited to:
    a. Existing Permits

b. Existing Certificate of Occupancy

c. Existing Use

d. Existing Violations

e. Building and Safety Property Profile Report

f. Planning Parcel Property Profile Report

g. Zoning Requirements, including but not limited to the following:

   i. Land Use Covenants

   ii. Flood Zone

   iii. Historic Zone

9. The System shall, based off the Applicant's initial responses and selections, generate a dynamic application that will ask a series of probing questions to collect as much information during the application phase as possible. For example:

   a. The address of the commercial business or project (facilitated by GIS lookup to identify flood plain, historical preservation, etc.)

   b. The commercial business or project type (Residential Building, Commercial Building, etc.)

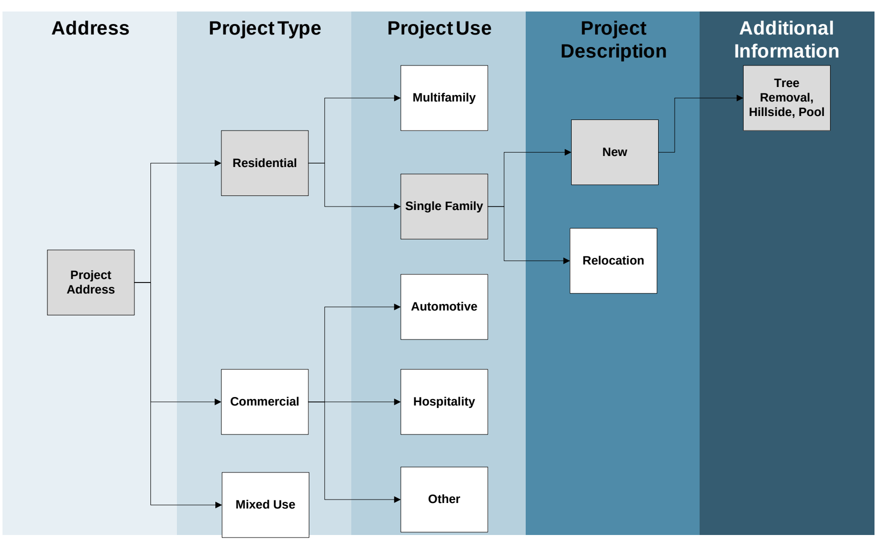
   c. The project use (Multifamily House, Single Family House, etc)

   d. Project description (Square Feet, Number of Rooms, Number of Bathrooms, etc.)

   e. Any additional information (Tree Removal, Hillside, Pool, etc.)

   f. Duration of work (start date, end date)

Figure 1. Select a Service Example



10. The Applicant provides all required specifics and the System shall determine what types of permits, inspections, clearances, bonds, and conditions are required.

a. As an option, the System shall have the capability to provide an estimated duration of the process as well as high level estimates of anticipated fees that are associated with the permitting process.

b. The Applicant shall be able to save the services overview at any point in the process for future modification or to submit an application.

11. The System shall present the overview of the process (permits required, inspections to be conducted, clearances required, bonds, conditions, etc), expected duration and fees to the Applicant.

12. The System shall prompt the Applicant if he or she would like to submit an application for the service.

13. The Applicant selects to complete an application.

Alternate Flows:

- If the Applicant is familiar with the City's services (e.g., "Advanced User") and has sufficient knowledge to bypass the guided process, the System shall allow the Applicant to select specific actions or task (such as forms for specific permits, etc.). In no case shall the structured process hinder an advanced user to directly and quickly interact with the City.
- Departments may be able to allow only specific user types to access this functionality (e.g., renewals).
- If the Applicant already has a user account, then he or she may log-in at the beginning of this use case. The System shall prompt the Applicant to indicate whether the application is for a location or address already stored in the user profile. If that is the case, Step 5 of this use case can be skipped.
- An Applicant may request for the address to be changed from the one on file to another address for purposes of the permit/ registration request.
- If there is no service that can meet the Applicant's needs or if the specifics of the project exceed the complexity the wizard can handle, the System shall trigger a workflow and notify Intake Staff of the service request for manual handling. The System shall notify the Applicant that an Intake Staff member will review the request and prompt the Applicant to either set up a user account or provide contact information.
- At any time the Applicant may discontinue completing the application, or withdraw the Application; The System shall be able to store applications for a pre-defined period of time and/or notify the Applicant that it will be deleted once the deadline is reached.
- At some point the information entered should be locked for review so that user can't change data after facilitator has started the review of the entered data.

Associations to other Use Cases:

- Use Case: Request Online Portal User Account
- Use Case: Submit Application Online

Additional Requirements

- The System shall have the ability to capture electronic signature
- The System shall have the ability to support an Applicant self-certifying the information they have entered is accurate and truthful

1.1.2 Use Case: Submit Application Online

Actor:

Applicant

Purpose and Objectives:

Completing applications online will increase both the accuracy and speed of the application process for Services. This Use Case describes the process of an Applicant interacting with the online portal to complete an application. Applicants may apply for a number of services from the System, such as a permit application, license applications, land development application, request an inspection, report a complaint, etc. Some example application types are provided below. These are not meant to provide an exhaustive list of all application types, rather to provide some examples of the common application types that will be submitted through the online portal.

Below are some example building permit types an Applicant would apply for:

- The Customer is requesting a Permit for a new building structure (Commercial or Residential).
  - Residential Building Permit Application
  - Commercial Building Permit Application
  - Commercial Remodel Permit Application
  - Commercial Grading Permit Application
  - Partial and Conditional Building Permit Form
  - Foundation Permit - Residential and Commercial
  - Heating/Air Conditioning Permit Fees – Residential (New Construction only)
  - Plumbing/Gas/Sewer Permit Application
  - Electrical Permit Application
  - Temporary Electrical Service Application
  - Floodplain Development Permit Application
- The Customer is requesting a Permit on an existing building.
  - Plumbing Application for Home Owner’s Permit
  - Plumbing One- And Two-Family Limited Service and Repair Permit
  - Foundation Repair Permit - Residential and Commercial
  - Electrical One- And Two-Family Limited Service and Repair Permit
  - Heating/Air Conditioning One-And-Two-Family Limited Service/Repair Permit
  - Annual Mechanical / Plumbing Maintenance Permit Application

- Annual Electrical Maintenance (Property) Permit
- Sidewalk Curb Application
- Re-roof Application
- Fence Permit Application
- Portable Storage Unit Affidavit
- General Repair Residential Permit Application
- Cellular of Wheels Permit Application
- Demolition Permit Application

- The Customer is requesting updates to an existing Permit.
  - Request to Link Child Permits to Parent
  - Permit Extension and Completion Request Form
  - Cancel Permit Request

Note that any application may not be specific to just a “Building Permit” but encompass several application components to include all permits, conditions and clearances required for the project across multiple departments.

Below are some example Plat Application Types that the System will support:

Table 1. Plat Application Types

Plat Application Type	Description
Plat Identification Number/Letter of Certification (LOC)	Request for a Plat Identification Number and/or Letter of Certification identifying the plat
Plat Deferral	Allows for building permit and/or utility services prior to completion of a plat
Administrative Exceptions	Approved by Staff
Variance	Approved by Planning Commission
Redline Amending Plat	Allows an approved plat to be corrected that has not been expired or recorded
Public Improvement Extension	Allows for additional time for an approved plat to complete required infrastructure prior to and after recordation
Replat	Existing plat is replatted (reconfigured); New plat number and follows new plat process
Amending Plat	Limited corrective changes to a plat; Occurs after approval and recordation
Vacate	Erases a portion or entire plat; Reverts back to unplatted property

Plat Application Type	Description
Vacate and Resubdivision	Same as above + New Plat Process
Building Setback Line (BSL)	Replat process to change or remove a BSL that is more restrictive than zoning or ETJ requirements
Rescind	Dissolves an Administrative or Planning Commission approval
Administrative Exception (Building Permit related)	Allows permit to deviate from UDC; Staff approval
Variance (Building Permit related)	Allows permit to deviate from UDC; Planning Commission approval

Below are some Land Entitlement Application Types that the System will support:

Table 2. Land Entitlement Application Types

Land Entitlement Application Type	Description
Master Development Plan (MDP)	A Master Plan provides guidance in the evaluation of future decisions on land use, infrastructure improvements, transportation, and other issues. Customer can submit an application for the following: • New MDP Plan (various types) • MDP Amendment (minor or major) Objective of an MDP Application is to obtain a passing review from LE and Reviewing Agencies that results in a Letter of Certification (LOC) from the Principal Planner and approval by the DSD Director.
Planned Unit Development (PUD) Plan	An MDP sub-type, a PUD allows for land regulation and unified development within a contained area or subdivision. Customer can submit an application for the following: • MDP/PUD Plan (combination) • New PUD Plan • PUD Amendment (minor or major) Objective of a PUD Application is to complete the same process as a MDP, but a PUD is also presented before the Planning Commission for a public hearing (property owners within a predefined boundary will be notified of the public hearing).

Land Entitlement Application Type	Description
Fair Notice	Required to be submitted to the City under various conditions (permit applications, MDPs, Subdivision Plats, PUD's, Rights Determination, etc.); Used to notify the City of a proposed project, the nature of the permit sought, and begin the process of rights recognition. The Fair Notice Form can also be amended to update a project description.
Certificate of Determination	DSD requires provision of a Certificate of Determination for various permit types. The goal of the COD process is to determine one of the following: • Platting is required • A plat has been previously prepared for the subject property (copy of recorded plat will be located and provided by staff for the customer) • Exception to platting is authorized and applicable plat exception will be indicated on the Certificate. The Applicant can proceed with permitting activity without platting. Decisions can be appealed to the Planning Commission. If denied, Applicant must plat.
Rights Determination	An applicant may request for recognition of previously acquired entitlements for a particular parcel or lot. If determined that sufficient information has been provided to grant request, a letter shall be issued to the applicant recognizing rights for the project, which also includes terms and conditions, and the Rights Determination Master List is updated. Decisions can be appealed to the Planning Commission and also escalated from the Planning Commission to the City Council. Rights are continued to be validated during platting, site work, and plan review stages of development through Rights Validation Reviews (which have associated fees). As reviews that the project is consistent with the project recognized within the Rights Determination, then rights are continued to be recognized.

Once a customer has selected a Service, the System shall provide a structured approach to determine what information, documents and/or plans are required from a customer.

- Through a decision tree process or similar, the System shall determine what permits and clearances are required and prompt the customer to enter the sum total of the information required for an application.
- This "tailored" application will include all information and plans required for the City to initiate the review of the application in parallel across multiple departments.

- Workflow within the System shall route the various application components to the departments responsible for review and ensure all clearances and conditions are obtained prior to issuing a permit.

Figure 2. Sample Application Checklist

Application for a new Building – Service #2 "Build a Building"

Permits required:	General Information	Situation Plan	Structural Plan	Electrical Plan	Plumbing Plan	Mechanical Plan
P1 - Building Permit	x	x	x	x	x	x
P2 - A Permit	x	x	x	x	x	
P3 - HPOZ Cert of Appropriateness	x	x	x			
P4 - Tree Removal	x	x				
P5 - Request Water	x	x	x		x	
P6 - Request Power	x	x	x	x		
P7 - HVAC Permit	x	x	x	x		

The application process will build on information previously entered and stored in the system during Use Case: Select a Service, and will include an automated check for completeness of the application and all necessary supporting documents.

Trigger Events:

- The Applicant chooses to submit an application for a service through the online portal (see *Use Case: Select a Service*).

Precondition:

- The Applicant has a user account with the System (see Use Case: Request Online Portal Account)
- The Applicant has saved certain project, resource, location, and application information in the system during *Use Case: Select a Service,* OR
- The Applicant has selected to bypass the Select Service wizard option and selected to submit an application for a specific service directly.

Post Condition:

- The application has been successfully submitted

Use Case Flow:

1. The System displays a tailored application for the project that was initiated during the *Use Case: Select a Service.*
   a. The System shall pre-populate the application with any information already entered by the Applicant during that use case including but not limited to location, resource, process, clearance, permit, inspection, and service information that has been identified.
2. The System shall dynamically respond to the information the Applicant enters regarding project details, prompting the Applicant to enter the information required for that project type.
   a. This includes validation of the address with DSD's central addressing repository

   b. This includes identifying application requirements for locations as identified through integration with the City's GIS Central Data Repository (e.g., zoning requirements)
   c. This includes conditions placed on the plat by the Land Development Department
   d. This includes identifying plan submission requirements based on project type
3. The Applicant modifies the existing application to include any additional data elements or requirements necessary to proceed for the selected service.
   a. The System shall allow the user to save and exit the application process at any point in time and complete the process at a later time.
   b. If the application requires plans, the System shall prompt the Applicant to upload all applicable plans through the online portal (see *Use Case: Submit Plans Online*).
   c. If the application requires supporting documentation such as permission letters, surety bonds, lease agreements, required affidavits, etc. the System shall prompt the Applicant to upload all supporting documentation.
4. The Applicant requests to submit the application.
5. The System shall validate that the application meets all requirements for the selected service, notify the Applicant of any compliance issues, and prevent the Application from advancing until the issues are resolved.
   a. The System shall alert Applicants to complete any required missing data in mandatory fields and prevent any submission of the application until the prerequisites are met.
   b. The System shall be able to perform automatic ordinance checks of the Application (e.g., fence height).
   c. The System shall be able to identify any administrative holds on the Applicant or project (e.g., outstanding fees due) that must be addressed before the application can proceed.
6. The System shall prompt the Applicant to indicate how the Applicant will pay for the application and any other associated fees (e.g., administrative fee); The Applicant submits payment (see *Use Case: Submit Online Payment*).
7. The System shall send a receipt, notification to the Applicant that the application has been received as indicated in the Applicant's user profile (e.g., email), as well as expected next steps in the process
8. Once the application has been completed, the System shall progress the application through the workflow according to pre-defined business logic.
9. The System shall support the capability to queue the application for review by a City employee prior to accepting the application package and routing to departments for processing (see *Use Case: Review Application for Completeness*)
10. The System shall support the capability to auto-approve application packages based on business logic and parameters.

Alternate Flows:

- If the System detects a potential compliance issue, the System shall inform the Applicant of additional requirements that need to be submitted/included. For example, if an address provided is invalid the System shall not allow the application to be completed.
- There may be a delay in GIS layers updated in the Central Data Repository that affects incoming applications. Supervisory overrides, or identifying questions (e.g., Is your project taking place in a recently developed neighborhood?) may allow for conditional approval of the application while the address is validated by an Intake Clerk.
- If the System detects a potential compliance issue (e.g., application includes fences that are too high to comply with an ordinance), the System shall direct the Applicant to submit a variance request
- The System shall allow for partial passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application
- The System shall allow for conditional passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application
- The Applicant visits the DSD building and completes/submits an application via paper, which is then entered into the System by the Intake Staff.
- The System shall provide a checklist/guide (similar to the Wizard provided for applicants) for Intake Staff to intake an application from a Customer in person at the counter.
- The Applicant visits the DSD building and completes all or a portion of application online in the lobby
- The Applicant visits the DSD building and completes all or a portion of the application via a mobile tablet.

Associations to other Use Cases:

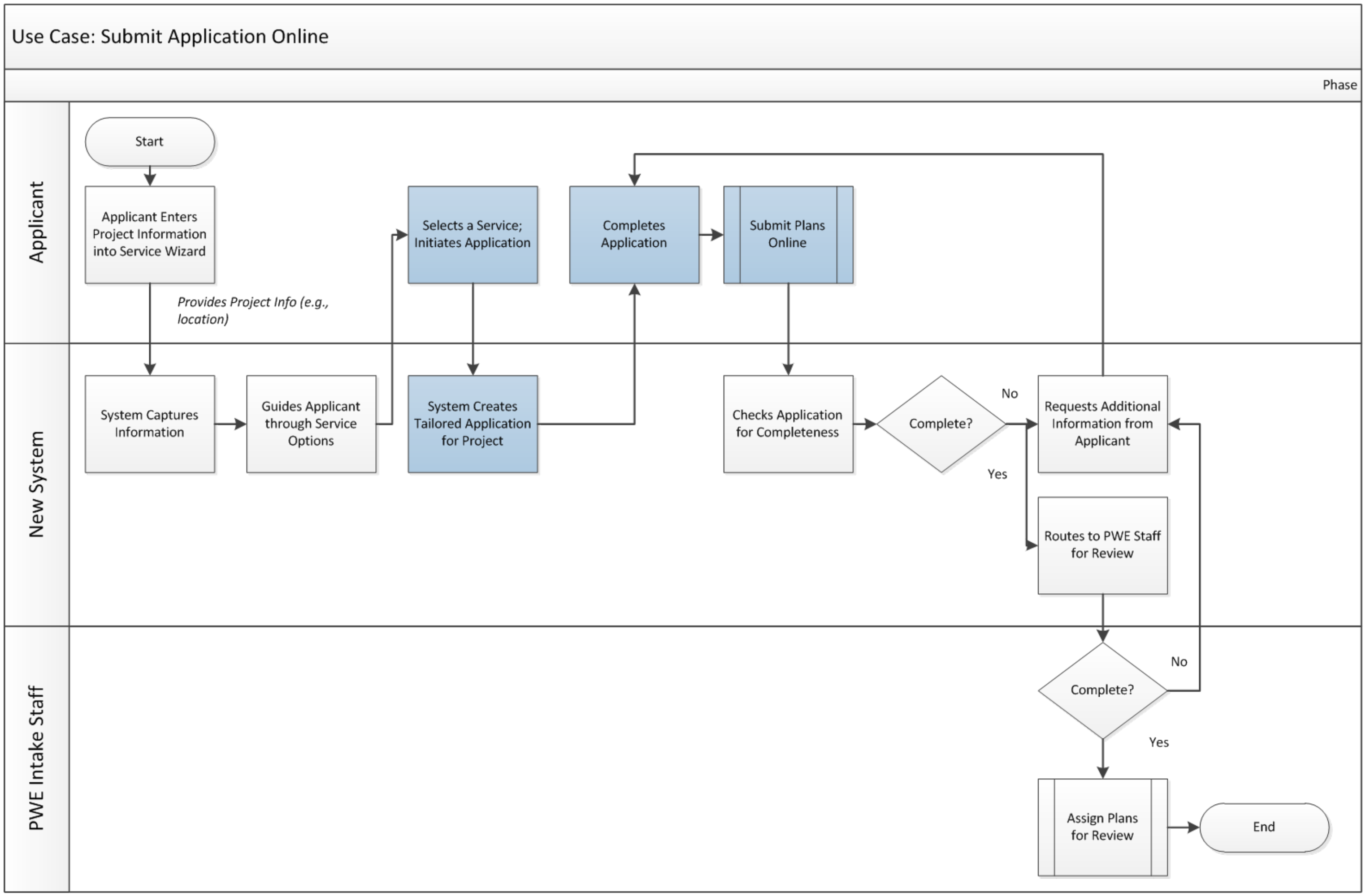
- Use Case: Select a Service
- Use Case: Submit Online Payment
- Use Case: Request Online Portal User Account

Additional Requirements:

- The System shall generate a tracking number based on business rules
  - This may be a permit number
- The System shall generate a dynamic application based on business rules and a series of prompts for the Applicant to answer
- The System shall generate permit requirements based on the project information entered by the Applicant
- The System shall generate conditions based on the project information entered by the Applicant

- The System shall generate a workflow and routing based on the project information supplied by the Applicant
- The System shall have the ability to send notifications and other communications to users based on predefined business rules and triggers.
- The System shall have the ability to capture electronic signature
- The System shall verify that a City Parcel Key(s), Bexar County Appraisal Parcel(s) ID, Addresses(s), legal description(s), lot(s), block(s), and NCB(s) once inserted into System is valid and exists through geo-validation/Arc Map GIS COSA Interface
- System application submittal process by the applicant to include the ability to capture the geometry, track, and map the geometry or shapefile information.
- The System will establish what information is needed to create the geometry GIS and request that specific information in the application
- Provide the ability to identify the geometry, attributes, and PDF document in a GIS spatial format automatically as information is inserted into System via a development application.
- The System will allow for real-time communication between GIS and System, with the ability to generate custom map exhibits for DSD customers.
- Once the application is submitted then System shall interface with ARCmap GIS to identify the geometry in the spatial map area.
- Completeness review would begin the creation of the GIS geometry and the final decision will then update the GIS geometry with final changes.

Figure 3. Submit Application Online Process Flow Diagram



Note: Major steps in Use Case: Submit Application Online are highlighted in blue

1.1.3 Use Case: Review Application for Completeness

Actor:

Departmental Intake Personnel ("Intake Staff")

Purpose and Objectives:

This Use Case describes the process of an Intake Staff reviewing an application that has been submitted through the online portal. The Intake Staff validates the application for completeness, performing checks that require human validation.

This Use Case may be necessary at outset of implementation, but the goal would be to get to a point where this Use Case could be skipped (or reduced to handling complex cases or exceptions flagged by the system) due to increased ability of business rules to accurately review applications for completeness without human interaction.

Trigger Events:

- An Applicant has successfully submitted an application, plans, and all supporting documents via the online portal (*Use Case: Submit Application Online*).

Precondition:

- The Applicant has submitted an application via the online portal.
  - Optionally, the Applicant has provided valid payment information as part of the application process (*Use Case: Submit Online Payment*)
  - When payment is required during the application process may vary according to permit type and associated department policies

Post Condition:

- The application has either been deemed complete or returned to the Applicant with a request for additional information (see *Use Case: Request Additional Information from the Applicant*)

Use Case Flow:

1. The Intake Staff logs into the system and accesses the queue of submitted applications.
   a. The System shall sort and filter applications based on predefined business logic, such as time-sensitive applications, chronologically, location-based, etc.
   b. The System shall allow the Intake Staff to search, sort and filter application records in an ad-hoc fashion.
2. The Intake Staff selects an application from the queue and reviews it for completeness, including:
   a. Application Information
   b. Plan Types submitted/required (may need to be deferred to a Plan Reviewer/Engineer)
   c. Other supporting documentation
3. The System shall allow for customizable checklist for application completeness based on application type

4. If the Intake Staff finds any discrepancies or requires additional information, the System shall provide a template to document the additional information required and return the application to the Applicant (see *Use Case: Request Additional Information from Applicant*)
5. The System shall notify the Applicant of additional information required via their preferred method of contact (e.g., email).
    a. If the application was submitted without payment instructions, the System shall send a notification to the Applicant after the application has been accepted.
    b. The System shall continue to send reminders to the Applicant if payment has not been submitted via their preferred method of contact.
6. Once the application review is complete and payment requirements have been satisfied, the Intake Staff shall update the application status indicating that it has been accepted.
7. The System shall route the application to the appropriate departments for processing based on business logic, if other departments' review and approval is required.
8. The System shall notify the Applicant that the application has been accepted and has moved into the processing phase based on the Applicant's predefined user preferences.

Alternate Flows:

- The System shall allow for partial passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application
- The System shall allow for conditional passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application
- The System may route an application to a specific department for further review (e.g., SAPD)
- The System shall support a pre-approved Contractors list, which would allow for different application requirements for Contractors who have previously gone through a screening/validation process.
- An Applicant may appeal the completeness review for certain application types (see *Use Case: Request Review of Issue*)

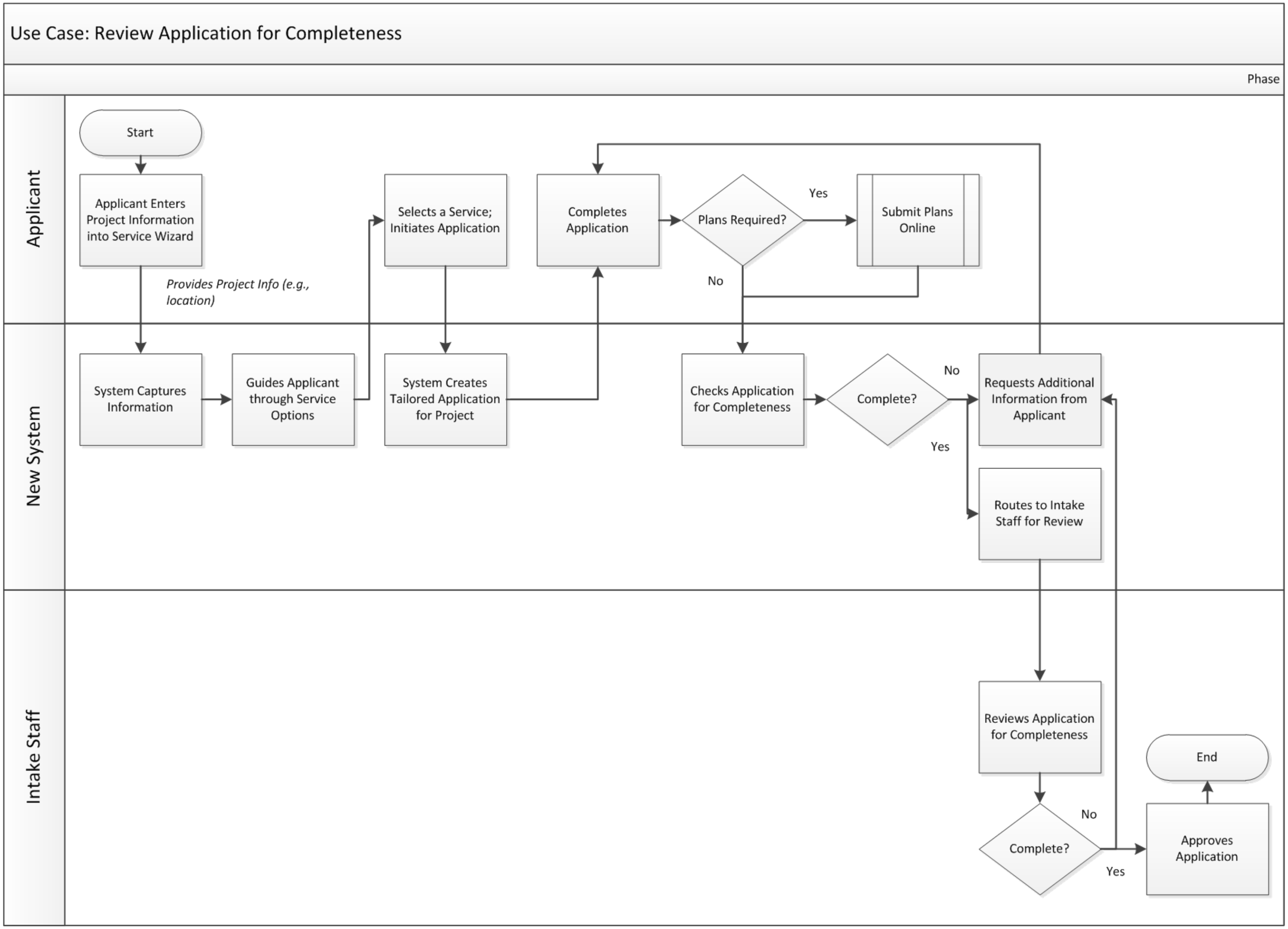
Associations to other Use Cases:

- Use Case: Request Additional Information from Applicant
- Use Case: Submit Application Online

Additional Requirements

- The System shall have the ability to capture electronic signature

Figure 4. Review Application for Completeness Process Flow Diagram



1.1.4 Use Case: Request Additional Information from Applicant

Actor:

Departmental Intake Staff (or "Intake Staff")

Purpose and Objectives:

This Use Case describes the process that Intake Staff will follow to request additional information from the Applicant once an application has been submitted via the online portal.

This Use Case may be necessary at outset of implementation, but the goal would be to get to a point where this Use Case could be skipped (or reduced to handling complex cases or exceptions flagged by the system) due to increased ability of business rules to accurately review applications for completeness without human interaction.

Trigger Events:

- *Use Case: Review Application for Completeness* has been completed, and the Intake Staff has reviewed an application that contains incorrect or incomplete information.

Precondition:

- An Applicant has submitted an application to the City via the online portal (*Use Case: Submit Online Application*)

Post Condition:

- The Intake Staff has requested additional information from the Applicant.
- The Applicant has received the request

Use Case Flow:

1. The Intake Staff has received an application and during the review (see *Use Case: Review Application for Completeness*) has noticed that the application package is either incorrect or additional information is required from the Applicant.
2. The Intake Staff determines it is necessary to contact the Applicant and inform them of the deficiencies of the application and required action.
3. The System shall allow the Intake Staff to notate specific sections of the application that are incomplete, such as registered contractors, application-specific data elements, location information, incomplete plans, etc. that require modification from the Applicant.
4. The System shall support multiple methods of notation including but not limited to free text fields, drop downs, etc.
5. The System shall generate a summary sheet along with a comments section to allow the Intake Staff to comment on the items to be provided/updated by the Applicant.
6. The System shall allow the Intake Staff to indicate what necessary steps the Applicant must take to resolve an incomplete application package.
7. The Intake Staff rejects the application, along with the Intake Staff's feedback including reason(s) for rejection.
8. The System shall send a notification to the Applicant with all of the comments and steps required to complete the application according to his or her notification preferences (e.g., email)

9. The Intake Staff may also contact the Applicant directly (e.g., phone call) per business rules
10. The System shall update the status and workflow of the application to reflect a need for additional information from the Applicant.

Alternate Flows:

- The System shall allow for partial passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application. In this use case, the Intake Staff would notify the Application of the partial pass, and the required follow up steps (including deadlines) to complete the process.
- The System shall allow for conditional passes of an Application according to pre-defined business rules, allowing downstream workflow tasks to be initiated while also monitoring the outstanding pieces of the application. In this use case, the Intake Staff would notify the Application of the conditional pass, and the required follow up steps (including deadlines) to complete the process.
- The System may allow for rerouting of an application to another specific department for further review (e.g., SAPD)
- The System will allow for Supervisor Override to push incomplete applications through the workflow

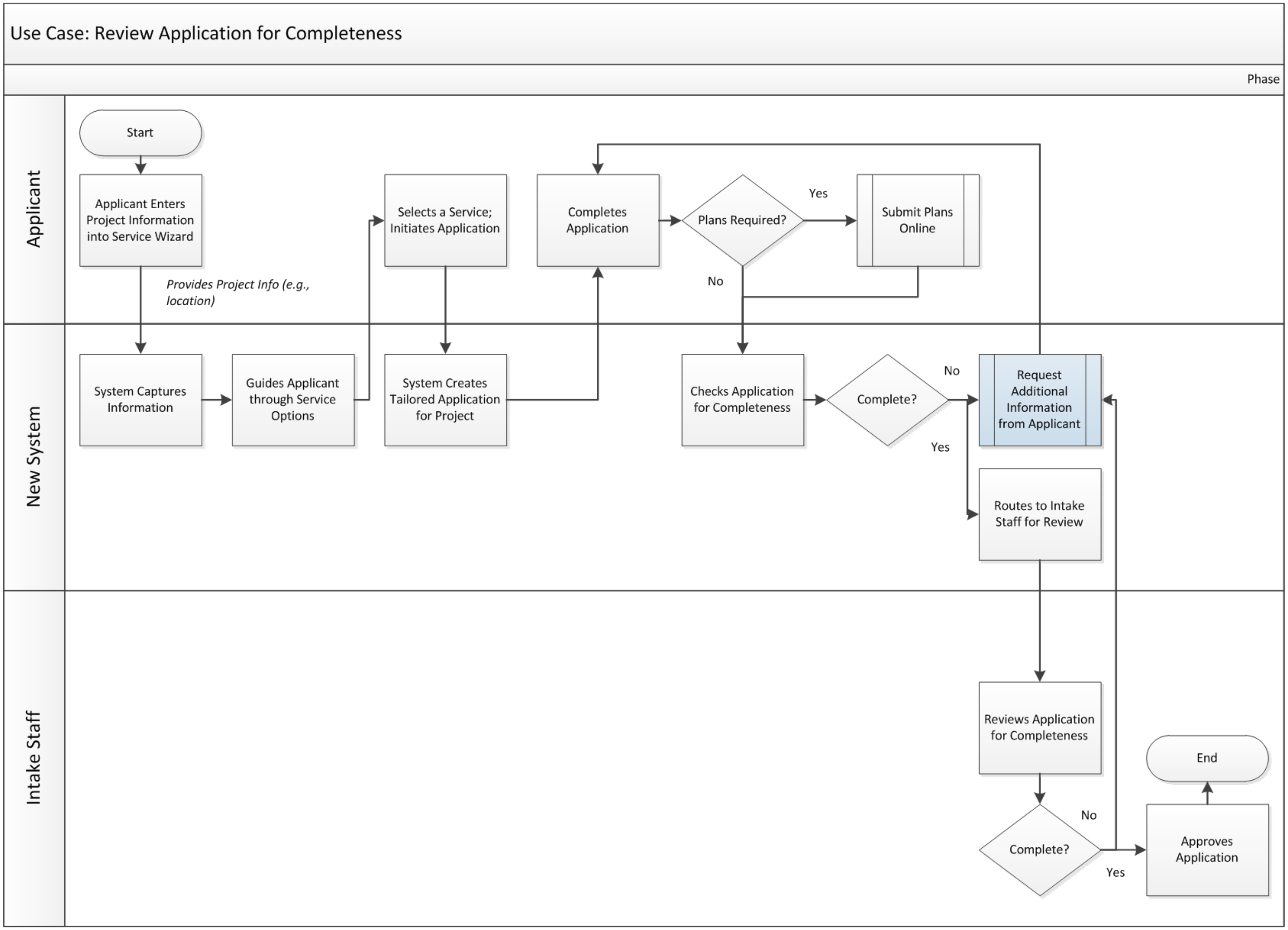
Associations to other Use Cases:

- Use Case: Review Application for Completeness
- Use Case: Submit Additional Information Online

Additional Requirements

- The System shall have the ability to capture electronic signature

Figure 5. Request Additional Information from Applicant Process Flow Diagram



1.1.5 Use Case: Review Application Status Online

Actor:

Applicant

Purpose and Objectives:

One of the major value propositions for the System is to increase transparency and accessibility for the City's customers. Through the online portal, Applicants will have the ability to track the status of their application on an ongoing basis.

This Use Case assists the Applicant to review the status of an application online.

Trigger Events:

- An Applicant wants to review the status of an application online.

Precondition:

- Applicant has a user account with the System.
- Application has been submitted and progressed to a point where status updates are available.

Post condition:

- The Applicant has reviewed the status of a permit application.

Use Case Flow

1. The Applicant accesses the online portal
2. The System shall display information relevant to the user, including but not limited to:
    a. Pending applications (including ageing metrics such as date of submission, days in current review phase, etc.)
    b. Remaining steps to completion
    c. Typical benchmarks for time to completion of City review.
    d. Pending actions, requests or other communications from the City.
    e. Responsible City Contact
3. The Applicant selects the application for which he or she would like to know the status
4. The System displays status information for the application
    a. The System shall have capabilities to review all-encompassing status of the application process and then drill-down into specific sections for further detail.
    b. If there are outstanding actions to be performed by the Applicant, the System shall provide the Applicant with options to progress the application through the service workflow.
    c. The System shall provide customer service communication avenues online (i.e. chat, email, call information).
    d. The System shall have extensive online help function to allow Applicants to do research on applications, inform themselves on next steps, etc.

Associations to other Use Cases:

- Use Case: Submit Application Online
- Use Case: Review Application for Completeness
- Use Case: Request Additional Information from Applicant
- Use Case: Submit Additional Information Online

Alternative Flow:

- Applicant reviews application status in person
- Applicant requests application information through Contact Us functionality on the online portal

Additional Requirements

- The System shall have the ability to capture electronic signature
- The System shall support chat help for all phases of the permitting process

1.1.6 Use Case: Submit Additional Information Online

Actor:

Applicant

Purpose and Objectives:

An Applicant may be required to provide additional information during the application processing or plan review phase. This Use Case assists the Applicant with providing the additional information online via the online portal.

Trigger Events:

- The Applicant has completed each step in the application process and now needs to upload additional information or documents
- The Applicant has received a notification that additional information or modifications to previous information is required (*Use Case: Request Additional Information from Applicant*).

Precondition:

- The Applicant has created a user account with the System
- An application is in process.

Post condition:

- The Applicant has successfully submitted additional information to their application.

Use Case Flow

1. The Applicant accesses the online portal
2. The System shall display information relevant to the user, including but not limited to any required action from the Applicant, such as providing additional information that has been requested by an Intake Staff member or Plan Reviewer.
3. The Applicant selects an application from the list and the System shall display the detailed request for information.
    a. If the application requires additional information that is specific to the package of data input into the application record (and not the plans or documents) the System shall highlight which sections of the application record need additional information. For example:
        i. Add a licensed electrical contractor and associated contact information.
        ii. Add insurance information.
4. If the application requires modifications/additional plans/documents the System shall present to the Applicant a summary comment from the requesting Intake Staff or Plan Reviewer as to the specifics of what is requested.
5. If plans are required, the System shall provide functionality to prompt the Applicant to upload plans (see *Use Case: Submit Plans Online*).
6. After the Applicant fulfilled the request for information, the System shall allow the Applicant to submit the updated application.

7. The System shall route the application for review of completeness/compliance as necessary to the appropriate actor (e.g., Intake Staff)

Associations to other Use Cases:

- Use Case: Submit Application Online
- Use Case: Submit Plans Online
- Use Case: Request Additional Information from Applicant

Alternative Flow:

- The Applicant may visit a DSD office and provide additional information in person
- The System should prevent an Applicant from pulling a permit if he is not a licensed contractor.

Additional Requirements:

- The System shall provide online help functionality, such as chat, email, or call.
- The System shall have the ability to capture electronic signature

1.1.7 Use Case: Request Online Portal User Account

Actor:

Applicant

Purpose and Objectives:

This Use Case outlines the process for an Applicant to request an account to access the client self service functionality available on the online portal.

Trigger Events:

- Applicant desires to perform a function on the online portal that requires a user account.

Precondition:

- Applicant has not previously created an account for online services.

Post condition:

- Request for user account has been submitted to the system administrator.

Use Case Flow:

1. The prospective Applicant accesses the online portal and selects the option to request a user account.
    a. The System shall display a template for the Applicant to enter his/her identifying information which includes but is not limited to the following:

i. First name
ii. Last name
iii. Mailing Address
iv. Date of birth
v. Phone number(s)
vi. Identification Number(s) (e.g., Drivers License)
vii. Email address
viii. Payment information (optional)

2. The Applicant shall have the option via the System to save payment information and allow for an option to process payment immediately after the application has been reviewed and accepted by the System Administrator, including both credit card information and/or an Escrow Account (see *Use Case: Request Escrow Account*).
   a. Project role (if applicable)
   b. Business information (if applicable)
3. The Applicant then specifies his/her personal online profile preferences.
   a. The system shall provide the Applicant with options such as:
      i. Configure communication preference (e-mail, phone, SMS, paper mail)
      ii. Best time to reach
4. The Applicant enters the information in the template and submits it.
5. The System shall ensure that all mandatory data fields have been completed.
6. The System shall route the online portal user account request to a designated System Administrator for review and approval.

Alternate Flows:

- The System will allow specific functions in the System to be performed without registering a user account, according to pre-defined business rules.

Associations to other Use Cases

- Use Case: Request Escrow Account
- Use Case: Submit Application Online
- Use Case: Activate Online Portal Account

Additional Requirements

- The System shall have the ability to capture electronic signature

1.1.8 Use Case: Activate Online Portal User Account

Actor:
Applicant

Purpose and Objectives:

Once an external user account request has been submitted online (see *Use Case: Submit Request for Online Portal Account)*, the account will either be created automatically by the System to routed to a System Administrator to set up the account (see *Use Case: Set Up User Account)*, according to business rules.

Once the account has been has been created by either mechanism, the prospective online portal user is notified and asked to activate the account. The user is provided with his/her user ID and a temporary, system generated password. During the account activation process, the user is prompted to change the password, acknowledge his/her roles and responsibilities, informed of the systems functionality and can specify personal user preferences.

This Use Case allows a user to activate his/her account for the online portal.

Trigger Events:
- User has been notified that account has been set up

Precondition:
- User account for online portal has been set up, user ID and temporary password has been created.

Post condition:
- User account has been activated

Use Case Flow:

1. The Online portal User accesses the online portal and logs on with the user name and temporary password provided by the online portal System Administrator.
    a. The system shall prompt the online portal User to change the temporary password.
2. The Online portal User enters a new, permanent password.
    a. The system shall display a welcome page and inform the user of his rights and responsibilities.
    b. The system shall prompt the user to acknowledge and accept roles and responsibilities.
    c. The system shall provide a tool for the Online portal User to familiarize his or herself with the system (e.g. through an online tutorial or similar).
3. The Online portal User then specifies his/her personal online profile preferences.
    a. The system shall provide the Online portal User with options such as:

   i. Preferred method of communication (e-mail, SMS, phone, etc.)
   ii. Preferences for receiving automated notifications or alerts (e-mail, SMS, etc.)
   iii. Best time to contact (during business hours, outside of business hours, etc.)
   iv. Subscription to alerts and notifications (changes to client record, new messages or referrals received, etc.)

4. The system shall display the selected options/preferences and allow the online portal User to confirm or change preferences.
5. When the Online portal User has completed activation process, the system generates a notification to the online portal User that the account was successfully activated.

Alternate Flows:

- The Applicant may not activate his or her account. Inactive accounts should be periodically made inactive according to predefined business rules. The System shall support the capability to notify account holders of upcoming inactivation.
- The System may determine that the account cannot be created according to predefined business rules (e.g., account already exists for that individual). The System should notify the Applicant of the reason(s) for denial and provide detailed information for the Applicant to resolve the issue.

Associations to other Use Cases

- Use Case: Request Online Portal Account

Additional Requirements to this Use Case

- None

1.1.9 Use Case: Modify or Withdraw Application

Actor:

Applicant

Purpose and Objectives:

One of the major value propositions for the online portal is to increase transparency for the City's customers when they interact with the City's departments to obtain a service. In addition to being able to submit and view their application status the Applicant will have the ability to modify or withdraw an application.

This Use Case assists the Applicant to withdraw or modify an application in process.

Trigger Events:

- The Applicant wants to modify to their necessary is necessary.
- The Applicant wants to withdraw their application.

Precondition:

- Applicant has a registered account.
- Application has been submitted and all initial system requirements have been satisfied based on reasonably defined business logic.

Post condition:

- The Applicant has reviewed the status of an application and made modifications, or
- The Applicant has withdrawn the application.

Use Case Flow

1. The Applicant connects to the online portal and selects to view their active applications.
2. The System shall display the Applicant dashboard with a section for all pending applications, including:
    a. Status of the application (including ageing metrics such as date of submission, days in current review phase, etc.)
    b. Remaining steps to completion
    c. Typical benchmarks for time to completion of City review.
    d. Pending actions, requests or other communications from the City.
3. The Applicant selects the application he or she would like to modify/withdraw.
4. The System shall provide the applicant with the ability to modify or withdraw an application so long as the application has not progressed beyond a certain point and other criteria according to pre-defined business rules.
    a. The system shall, dependant on business rules, prompt the user to request a refund if they decide to withdraw an application. (see *Use Case: Request a Refund*)
    b. The System shall alert all parties currently reviewing the application that a modification has been performed or that it has been withdrawn.

Associations to other Use Cases:

- Request Online Portal User Account
- Request a Refund

Alternative Flow:

- The Applicant modifies or withdraws the application in person

- The System prevents the application from being modified or withdrawn. The System provides the Applicant with detailed information regarding the reason(s) for the action, and provides the Applicant with contact information to follow up with City personnel.

1.1.10 Use Case: Record Internal Note

Actor:

City Employee

Purpose and Objectives:

The purpose of this Use Case is to allow a City Employee performing an activity such as collaborating on an application for service, conducting an inspection or investigation, etc. to append general informational notes to records. Any internal employee will be able to view the notes. These case notes provide general information relevant to the record outside of typical application intake, processing, and workflow capabilities.

Trigger Events:

- A City Employee wants to record a note on a record for sharing with other City Employees collaborating on that record.

Precondition:

- Collaborating City Employees have accounts in the System.

Post condition:

- A City Employee has recorded a note on in the system.

Use Case Flow

1. The City Employee logs into the system, navigates to the proper record, and reviews the record.
2. The Employee selects the option to add an internal note.
    a. The System shall display a template for the City Employee to enter a note.
    b. The System shall pre-populate the template with information of the City Employee, based on the profile of the user logged into the system and the associated application, such as:
        i. Name and role of person recording the note
        ii. Date and time the note was left
    c. The System shall provide the City Employee with a template to enter free text into the note and is a part of the pre-populated template referenced above.
    d. The System shall allow City Employee to associate related records.
3. The City Employee enters the note and as an option, associates supporting documents or plans.
    a. The System shall allow the City Employee to attach files to a message.

4. The City Employee verifies the note and submits it in the System.
5. The System shall have the capability to send electronic notifications to collaborating City Employees when notes are added/modified on a record they are assigned to.

Associations to other Use Cases:

- All

Alternative Flow:

- The City Employee may update or edit the note.
- The System will allow or disallow the updating, editing, or deleting of notes according to business rules.

Additional Requirements:

- The System will allow notes to be flagged internal only or available to the Applicants (i.e. visible in the application record detail via the portal or in reports).
- Notes recorded via the system can flag electronic notifications to the desired recipients based on information captured in their user profile (i.e. SMS, email)
- The System shall also have the capability to record action taken on a record (e.g., application approved) as a “note”, viewable in the same way as internal notes, capturing the person responsible, and the date and time of the action to manage and view activity taken on a record.

1.2 Land Development Use Cases

Land Development use cases demonstrate the enforcement of rules and regulations related to land development through multiple business processes, such as zoning, reviews before governing authorities, and land entitlement (addressing, fair notice, rights determination, planning, etc.). The Land Development team is responsible for the review and approval process of Master Development Plans (MDP's), plats, trees preservation, infrastructure, traffic impact analysis (TIA's), zoning, and addressing, and also supports the Planning Commission, Zoning Commission, and Board of Adjustments.

1.2.1 Use Case: Perform Platting

Actor(s):

- Departmental City Land Development Staff ("LD Staff")
- Secondary: Applicant

Purpose and Objectives:

The purpose of this use case is to outline the process of platting a property. Platting records a property's identification (size and shape, legal description) and allows for regulation of development (e.g., standards of construction of infrastructure facilities). For various permit types, platted status may need to be verified by a Reviewer through platting or through a Certificate of Determination (request for a plat exception). The parent/child relationship between a plat and associated development projects also needs to be maintained by the System (see *Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications*).

Trigger Events:

- Applicant submits an application related to platting (see *Use Case: Submit Application Online*)

Precondition:

- Application has been completed (see *Use Case: Submit Application Online*)

Post condition:

- Property has been platted and record updated in the System

Use Case Flow

1. Applicant submits an application related to platting (see *Use Case: Submit Application Online*).
   a. Applicant may track his or her plat online (see *Use Case: Check Status of Application Online*)
2. System assigns Plat a Plat Number.
3. Application is reviewed for completeness (see *Use Case: Review Application for Completeness*) and any required payment is collected (see *Use Case: Submit Online Payment)*.
4. Once the application is deemed complete and all fees are paid, the application will be assigned to LD Staff (e.g., Case Manager).

5. LD Staff reviews the application and determines it is ready for Technical Review. LD Staff initiates the technical review process (see *Use Case: Perform Technical Review of Land Development Application*). This includes the following actions the System must support:
    a. Indicating the "clock" for the technical review should begin
    b. Determining and selecting what agencies need to perform the review based on the type of application/request
    c. Selecting what documentation/packets need to be sent to what reviewing agencies
    d. Sending that documentation electronically
6. System assigns technical review to selected Reviewing Agencies
7. Reviewing Agencies log on to the System and select to complete the review.
8. Reviewing Agencies complete the Technical Review and enter their comments in the System (see *Use Case: Perform Technical Review of Land Development Application*).
9. System notifies LD Staff when technical reviews have been completed.
10. LD Staff reviews the results of the technical review and routes the request for review to other required internal LD Staff for review (e.g., Principal Planner).
11. Once required LD Staff has reviewed and approved, LD Staff updates the status of the plat to approved.
    a. System notifies customer of approval according to business rules
12. LD Staff completes Plat Approval Completeness Form in the System.
13. LD Staff performs final checks, including but not limited to the following:
    a. Were any changes requested by a reviewing agency or director?
    b. Are there liens on the property?
    c. If any final checks require resolution, LD Staff follows up with the Applicant and plat approval does not progress until issues resolved.
14. LD Staff Reviews Plat for Release
    a. Indicates all final checks have been completed
    b. Enters Plat File Date in System
    c. Initiates Final 5 Day Review
15. System notifies all required parties that Final 5 Day Review period has commenced (all Reviewing Agencies, Principal Planner, Addressing Team, etc.)
16. Parties have five days to submit any further comments. If any comments are submitted, the Technical Review process will repeat until issues resolved.
17. Once the Final 5 Day Review period has ended, LD Staff submits the Plat for Approval to a governing body.
    a. If a major plat, referred to the Planning Commission
        i. See *Use Case: Request Review of Issue, Use Case: Schedule Review, Use Case: Conduct Review*

b. If a minor plat, referred to DSD Director for review

i. See *Use Case: Conduct Review*

18. Once the review has been conducted by the governing authority, and a Review Officer(s) have given approval, the LD Staff updates the status of the plat in the System to approved.

i. Plat mylars are stamped for approval

- See *Use Case: Review Plans* for requirements for stamping final, approved plans

ii. Approval date captured in the System

19. The System initiates the recordation period and the System, or LD Staff, will initiate downstream workflow activities including but not limited to the following:

a. Any bonding processes are initiated (see *Use Case: Manage Performance Agreement*)

b. Inspections of the infrastructure (streets, drainage, sidewalks, driveways, curbs, water/sewer) will be created and/or conducted (see *Use Case: Create Inspection*, *Use Case: Conduct Inspection*)

i. Inspections may be performed by outside agencies (e.g., Water/Sewer inspections performed by SAWS)

c. Street Light plan must be submitted, and installation and fees are captured after the decision of plat approval and prior to recordation

20. The System will monitor the recordation timeframe, which lasts from plat approval to recordation, requiring the developer to record the plat within three years.

a. If required improvements are not performed within three years, developer may request a time extension (see *Use Case: Process Time Extension for Plat/Site Improvements*)

Alternative Flow:

- If LD Staff (e.g., Case Manager) was previously assigned to the plat, the application will be routed to the previously assigned Case Manager to ensure consistency.
- An Applicant may submit a request for a Plat Deferral, which allows for building permit and/or utility services to be issued prior to completion of a plat; Would result in a temporary building permit (see *Use Case: Issue Permit*) and specific conditions must be met to allow for deferral.
  - ❑ If plat is deferred, the System must prevent an issuance of a Certificate of Occupancy (COO) until the plat is recorded
  - ❑ Plat would also be flagged (see *Use Case: Flag a Property/Lot or Parcel*)
- An Applicant may appeal the result of the completeness review (see *Use Case: Request Review of Issue*)
- Additional fees may be charged as part of the Technical Review and the application would not proceed until the fees were paid, or fees could be deferred to be paid prior to recordation for plats or prior to MDP/PUD approval.

- If property is part of the ETJ, referred to Commissioners Court and process conducted by Bexar County; the review is conducted and documents are returned to LD Staff and processed for recordation following the review.
- The System must be able to support the following plat application types:

Plat Application Type	Description	Unique Requirements
Replat	Existing plat is replatted (reconfigured); New plat number and follows new plat process	Combine, subdivide or amend parcels without vacation; Requires PC approval
Amending Plat	Limited corrective changes to a plat; Occurs after approval and recordation	Various reviews and approvals
Vacate	Erases a portion or entire plat; Reverts back to unplatted property	Various reviews and approvals
Vacate and Resubdivision	Same as above + New Plat Process	Various reviews and approvals
Building Setback Line (BSL)	Replat process to change or remove a BSL that is more restrictive than zoning or ETJ requirements	Need prints of proposed replat; Minor can be approved by DSD; Major by Planning Commission
Rescind	Dissolves an Administrative or Planning Commission approval	
Administrative Exception (Building Permit related)	Allows permit to deviate from UDC; Staff approval	At the permit level
Variance (Building Permit related)	Allows permit to deviate from UDC; Planning Commission approval	At the permit level
Plat Deferral	Allows for building permit and/or utility services prior to completion of a plat	Temporary Building Permit; Specific conditions must be met
Administrative Exceptions	Approved by Staff	Deviation approved at the plat level
Variance	Approved by Planning Commission	Deviation approved at the plat level
Redline Amending Plat	Allows an approved plat to be corrected that has not been expired or recorded	Various reviews and approval; Upon approval new prints submitted
Time Extension	Extension for recordation	Can't have public improvements; Various reviews and approvals needed
Public Improvement Extension	Allows for additional time for an approved plat to complete required infrastructure prior to and after recordation	Receive request; Capture % Complete and improvements remaining; Review by SAWS and Engineering; Planning Commission Approval needed

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Review Plans
- Use Case: Submit Online Payment
- Use Case: Request Additional Information from Applicant
- Use Case: Submit Additional Information Online
- Use Case: Modify or Withdraw Application
- Use Case: Review Application Status Online

Additional Requirements

- None

1.2.2 Use Case: Verify Zoning of a Property

Actor(s):

- Departmental City Land Development Staff ("LD Staff")
- Secondary: Applicant

Purpose and Objectives:

The purpose of this use case is to outline the process of verifying the zoning of a property. Zoning regulates land usage including size, shape, and permitted uses of lots and structures. For various permit types, zoning designation may need to be verified by LD Staff. The parent/child relationship between a plat and associated development projects also needs to be maintained by the System (see *Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications*).

Trigger Events:

- Applicant submits an application for a zoning verification letter (see *Use Case: Submit Application Online*)

Precondition:

- Application has been completed (see *Use Case: Submit Application Online*)
- Zoning information for the property is maintained in the GIS Central Data Repository

Post condition:

- Zoning information for the property has been provided to the Applicant

Use Case Flow

1. Applicant submits an application for a zoning verification letter (see *Use Case: Submit Application Online*).
    a. There are three types of zoning verification letters, and the Applicant may select to have one or more of them issued as part of the application.
        i. Zoning: Verifies current zoning of a property and indicates if specified use is allowed in the applicable zoning district

ii. Variance: Verifies if any variances have been approved by the Board of Adjustment for the specified property

iii. Nonconforming Use: Verifies if a nonconforming use has been registered on the specified site or other nonconforming use related information

b. As part of the application process, the System will require any supporting documentation required to process the application (map, survey, plat, etc.) and also collect required fees (see *Use Case: Submit Online Payment*)

i. The System shall also support expedited process and associated fees

2. Application is reviewed for completeness (see *Use Case: Review Application for Completeness*).
3. Once the application is deemed complete and all fees are paid, the application will be assigned to LD Staff (e.g., Zoning Planner).
4. LD Staff reviews the application and performs the appropriate research given the request type. This includes the following actions the System must support:
   a. Searching for and verifying the current zoning of the property
   b. Searching for and verifying any variances assigned to the property
   c. Searching for and verifying any registrations for non-conforming use
5. LD Staff will select to generate a Zoning Verification Letter out of the System
6. The System will provide a customizable Zoning Verification Letter template
   a. The template may be pre-populated with the property information from the System
   b. LD Staff will customize the letter to include his or her findings (zoning, variance, and/or non-conforming use)
   c. LD Staff will select to send the letter to the Applicant according to communication preferences (i.e., email, mail, both).
7. The System saves the Zoning Verification Letter to the property
8. The System closes the application and updates the record with the information of when the letter was sent to the Applicant.
9. The Applicant is notified of the status update and logs into the online portal to view the letter.

Alternative Flow:

- Upon receiving the results of the zoning verification letter, the Applicant may determine he or she needs to pursue rezoning or a registration of non-conforming use. This would result in the Applicant submitting an application (see *Use Case*: *Submit Online Application*), which would then be processed accordingly through the related business processes (see *Use Case: Perform Technical Review of Land Development Application, Use Case: Request Review of Issue*).

Associations to other use cases:

- Use Case: Submit Online Application

- Use Case: Perform Technical Review of Land Development Application
- Use Case: Request Review of Issue
- Use Case: Conduct Review
- Use Case: Request Additional Information from Applicant
- Use Case: Submit Online Payment

Additional Requirements

- The System must support integration with the City's GIS Central Data Repository, which will maintain zoning data

1.2.3 Use Case: Perform Technical Review of Land Development Application

Actor(s):

- Primary: Departmental City Land Development Staff ("LD Staff")
- Secondary: Reviewing Agencies

Purpose and Objectives:

The purpose of this use case is to outline the process of a technical review of a Land Development application. There are multiple types of Land Development applications that must go through a Technical Review. Technical Reviews are performed by designated Reviewing Agencies which can be internal (e.g., DSD Land Development) or external (e.g., SAWS). They perform a review that is specific to their agency's requirements. Comments and outcome is stored in the System and process is overseen by LD Staff (e.g., Case Manager).

Applications will be accepted through the intake process (see *Use Case*: *Submit Application Online*) and reviewed for completeness. After the completeness review (see *Use Case: Review Application for Completeness)*, and after any applicable fees are collected (see *Use Case: Submit Online Payment)* the application will be ready for a Technical Review. The process for a Technical Review is outlined below.

Trigger Events:

- LD Staff initiates Technical Review

Precondition:

- Application has been completed (see *Use Case: Submit Application Online*)
- Application has been determined to be complete (see *Use Case: Review Application for Completeness*)
- Any required fees have been paid (see *Use Case: Submit Online Payment*)
- Application has been routed to and assigned to appropriate LD Staff

Post condition:

- Technical review comments are stored in the System from all required Reviewing Agencies.

Use Case Flow

1. System notifies LD Staff that Completeness Review has been completed, and the application is ready for the Technical Review
2. LD Staff initiates Technical Review
   a. System shall start "the clock" which will track the time it takes to complete the review and manage any deadlines, and associated notifications, for the review.
3. LD Staff indicates which Reviewing Agencies must participate in the review based on the document type and request
   a. The System shall provide a checklist of Reviewing Agencies LD Staff may select from
   b. In addition to internal departments (e.g., Land Develop TIA section), Reviewing Agencies may be external agencies, including but not limited to the following:
      i. Public Works
      ii. Parks & Recreation
      iii. SAWS
      iv. Applicable counties
      v. Office of Historic Preservation
      vi. COSA Office of Military Affairs
      vii. CPS Energy
      viii. VIA Metropolitan Transit
      ix. Applicable school districts
      x. Camp Bullis
   c. The System shall also support identification of Reviewing Agencies through GIS integration, by pinpointing the affected property on a map and identifying affected city council districts, etc.
      i. This shall also support identifying affected property owners within a predefined radius who must be notified of the application
4. LD Staff selects the Reviewing Agencies and submits request for Technical Review
5. The System notifies the Reviewing Agencies of the Technical Review.
6. Reviewing Agencies log into the online portal and select the appropriate Technical Review from their queue. The review process begins (see *Use Case: Review Plans*).
7. Once the review is completed, and the comments are recorded in the System, LD Staff performs any required follow up actions.
   a. If approved, the process can proceed forward.
   b. If denied, the Applicant is notified. If eligible for appeal, the Applicant may appeal the decision to the appropriate governing authority (e.g., Planning Commission) – see *Use Case: Request Review of Issue*).
   c. If the technical review could not be completed because further information was needed to complete the review (see *Use Case: Request Additional Information*

from Applicant), the process would repeat and the time clock would reset accordingly.

8. The System initiates any downstream workflow activities related to the application based on the completed status of the Technical Review, such as a staff recommendation (see *Use Case*: *Document Staff Recommendation*)

Alternative Flow:

- If the review was incomplete or denied, the Applicant will have a certain period of time (e.g., two years) to follow up on the application. If he or she does not, the request is retired – see *Use Case: Modify or Withdraw Application*.

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Review Plans
- Use Case: Submit Online Payment
- Use Case: Request Additional Information from Applicant
- Use Case: Submit Additional Information Online
- Use Case: Modify or Withdraw Application
- Use Case: Review Application Status Online

Additional Requirements

- None

1.2.4 Use Case: Document Staff Recommendation

Actor:

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

This Use Case outlines the process of LD Staff formulating a staff recommendation based on the results of the technical reviews and any individual activities LD Staff has performed to research and validate the Land Development Application request. The staff recommendation is presented to a governing authority, such as a Director or Board/Commission who reviews the Staff Recommendation as part of their decision (approval/denial) on an application/case.

Trigger Events:

- Technical Review is complete

Precondition:

- Technical Review has been completed
- Application requires a Staff Recommendation

Post condition:

- The Staff Recommendation and any supporting documentation are captured in the System.

Use Case Flow

1. LD Staff selects an application from the System that has a completed technical review and is due for a staff review and recommendation.
2. LD Staff ensures all Reviewing Agencies have completed their technical review, provided comments, and reviews the technical review results
    a. Depending on the type of application, LD Staff may also perform a number of actions to assist in the review/recommendation process, including but not limited to the following, that will be captured in the System:
        i. Site visit to take pictures
        ii. Post notices (e.g., rezoning sign) onsite
        iii. Document surrounding land uses and neighborhood character
        iv. Document existing infrastructure
    b. Depending on the type of application, LD Staff may need to research the request to determine its validity and/or any further fees associated with the request. The System should support a checklist for the application type, that prompts LD Staff to capture information including but not limited to the following:
        i. Is the request valid?
        ii. Is the request available/possible? (e.g., street address name is available for a name change request)
        iii. Is the request authorized (e.g., Verify applicant is the property owner)?
        iv. Is the request inside or outside city limits?
3. LD Staff captures their recommendation in the System
    a. This may be a simple approval/denial with or without comments
    b. This may result in a formal letter generated from the System
4. LD Staff begins the process of preparing for the review of the application before a governing body – see *Use Case: Schedule Review* and *Use Case: Build Agenda for Review*.
    a. This may include a briefing of personnel on the staff recommendation
5. Applicant is notified of Staff Recommendation and provided any status updates according to predefined business rules.

Associations to Other Use Cases:

- Use Case: Submit Application Online
- Use Case: Schedule Review

- Use Case: Conduct Review
- Use Case: Build Agenda for Review

Alternative Flow:

- If the application does not require review before a governing authority and the staff recommendation/decision is the final step, the Applicant will be notified of the decision after Step 3

Additional Requirements:

- The System shall have the ability to capture electronic signature

1.2.5 Use Case: Build Agenda for Review

Actor(s):

- Primary: Departmental City Land Development Staff ("LD Staff")
- Secondary: City Personnel responsible for performing reviews of customer appeals ("Review Officer"), which will vary according to review type. Examples of personnel include Board Members, Departmental Supervisors, review officers, etc.

Purpose and Objectives:

This Use Case outlines the process of a preparing an agenda for a formal meeting where an issue is reviewed before a governing authority. This scenario may arise from a variety of situations, such as appeals of a violation or rejection of an application, reviews of plans, or requests for exceptions, variances, code modifications, etc. LD Staff is responsible for preparing for the review.

Trigger Events:

- An issue is scheduled for a review (see Use Case: Schedule Review)

Precondition:

- A property/lot or parcel exists in the System and has been scheduled for review

Post condition:

- An agenda is prepared for the review
- All relevant information has been prepared for the review
- All parties have been notified of the review

Use Case Flow

1. LD Staff logs into the System and views a list of upcoming reviews he or she has scheduled and/or been assigned.
2. LD Staff selects to view the checklist associated with the review to determine the actions he or she needs to take to prepare for the review. The checklist includes items like the following and will be customized according to the type of review:
    a. Prepare Public Hearing notices

   i. The System shall support the ability to generate public hearing notices from a customizable template

  b. Identify all plats/properties designated for review (e.g., search on plat filing date)

  c. Ensure all identified properties have an associated Staff Recommendation stored in the System

  d. Build meeting materials (e.g., Cover Sheets)

  e. Build agenda

   i. The System shall support an agenda template that can be customized

   ii. The System shall support routing of the agenda for drafting and review processes

   iii. The System shall support routing of supporting documentation (e.g., plans) for drafting and review processes

  f. Distribute agenda to all stakeholders (e.g., Deputy City Managers)

3. LD Staff performs the required actions, either inside or outside of the System depending on the action, and indicates on the checklist whether all items have been completed.

4. LD Staff sends all final documentation to Review Officers participating in the review.

5. LD Staff prepares printed copies of all required documentation for the review. For example, finding and printing copies of plans to be reviewed.

6. LD Staff finalizes agenda and posts online at DSD website and the Board Com City Clerks Main page; Emails to team lead, supervisors, Executive Team, Deputy City Managers, etc.

  a. System should allow LD Staff to select recipients from a checklist and automatically distribute electronically

  b. Also posts printed copy downtown (outside of System)

Alternative Flow:

- LD Staff may perform a number of actions outside of the System to prepare for the review.
- The System may interface with an Agenda Builder application, which will generate a staff recommendation document and the agenda that would then be stored and/or accessible by the System.

Associations to other use cases:

- Use Case: Schedule Review
- Use Case: Conduct Review
- Use Case: Document Staff Recommendation

Additional Requirements

- The System shall support electronic signature.

1.2.6 Use Case: Assign New Address

Actor(s):

- Primary: Departmental Land Development Addressing Staff (“Address Specialist”)
- Secondary: Departmental City Land Development Staff (“LD Staff”)
- Secondary: ITSD GIS Specialists (“IT/GIS Team”)

Purpose and Objectives:

The purpose of this use case is to outline the process of Land Development staff in maintaining oversight of the addressing of properties within the city limits.

Trigger Events:

- An Applicant submits an application for a new plat that requires addressing

Precondition:

- Application has been submitted (see *Use Case: Submit Application Online*)
- Plat intake process has begun (see *Use Case: Perform Platting*)

Post condition:

- The address for the property/lot or parcel has been captured in the System, including updates made in the Central GIS Repository

Use Case Flow

1. LD Staff routes the plat application to an Addressing Specialist for addressing assignment
    a. Application may include a Request for Address Assignment/Verification form or any supporting documentation (i.e. plats, floor plans, site plans, etc.).
2. Address Specialist performs a completeness review (see *Use Case: Review Application for Completeness)*, which also confirms the address provided matches the site plan.
    a. If there are any issues, the Address Specialist works with LD Staff and the Applicant to resolve them (see *Use Case: Request Additional Information from Applicant*).
3. The Address Specialist then begins processing the application by verifying the address is within the City limits by looking at the site address location provided.
4. The Address Specialist must determine the address type needed, either a partition of an existing address (assignments of suite, unit, or building numbers), or a new address.
    a. If the request is for partition, the Applicant will have provided a proposed assignment. The Address Specialist will review the proposed assignment and either approve or deny the proposed address.
    b. If the request is for a new address, the Address Specialist determines what the address should be according to City of San Antonio addressing code regulations

5. The Address Specialist contacts the IT/GIS Team to create the new address in the City's GIS Central Data Repository and provides information related to the creation of the new address.
    a. The new address can include the following information for a property:
        i. Street Address (streets may already have been named by the Developer with approval by the post office)
        ii. Lot Numbers
        iii. Block Numbers
        iv. New City Block (NCB) Numbers
        v. Building Numbers
        vi. Suite Numbers
6. IT/GIS Team creates the new address in the City's GIS Central Data Repository
    a. Addressing tools (i.e. ESRI, Arch/Map) will enforce address assignment validation rules
7. The IT/GIS Team saves the final address in the City's GIS Central Data Repository (either the newly created address or the approved partition request from the Applicant)
8. A syncing process runs periodically to sync the System with the GIS information
    a. This can happen real time after the address is created
9. The Address Specialist attaches the newly created address to the property record

Alternative Flow:

- The Address Specialist may coordinate with IT Personnel to create the address in the GIS Central Data Repository
- If an address request has come in for a plat that has not been recorded, a preliminary address can be assigned at the time of the Plat technical review. The address will be flagged as a preliminary address – the address will not be considered final until the plat is recorded.
    - ❑ Any changes to the plat, site plan, or MDP that could affect addressing must be resubmitted for review along with readdressing fees
    - ❑ If multiple buildings are proposed for the project, a site plan will need to be submitted
    - ❑ If suites are proposed within the building, a site plan will need to be submitted
- An Application may come in for a request to change an existing street name; The Application will go through intake, completeness review, technical review, staff recommendation, and review.
    - ❑ Several additional external entities (Public Works, Texas Department of Transportation, etc.) will be involved in performing the review and processing the change.
- An Applicant may request a change to the existing address
- An Applicant may request the change of address on a building permit.

- Applicants may submit requests in person and be assisted by LD Staff members

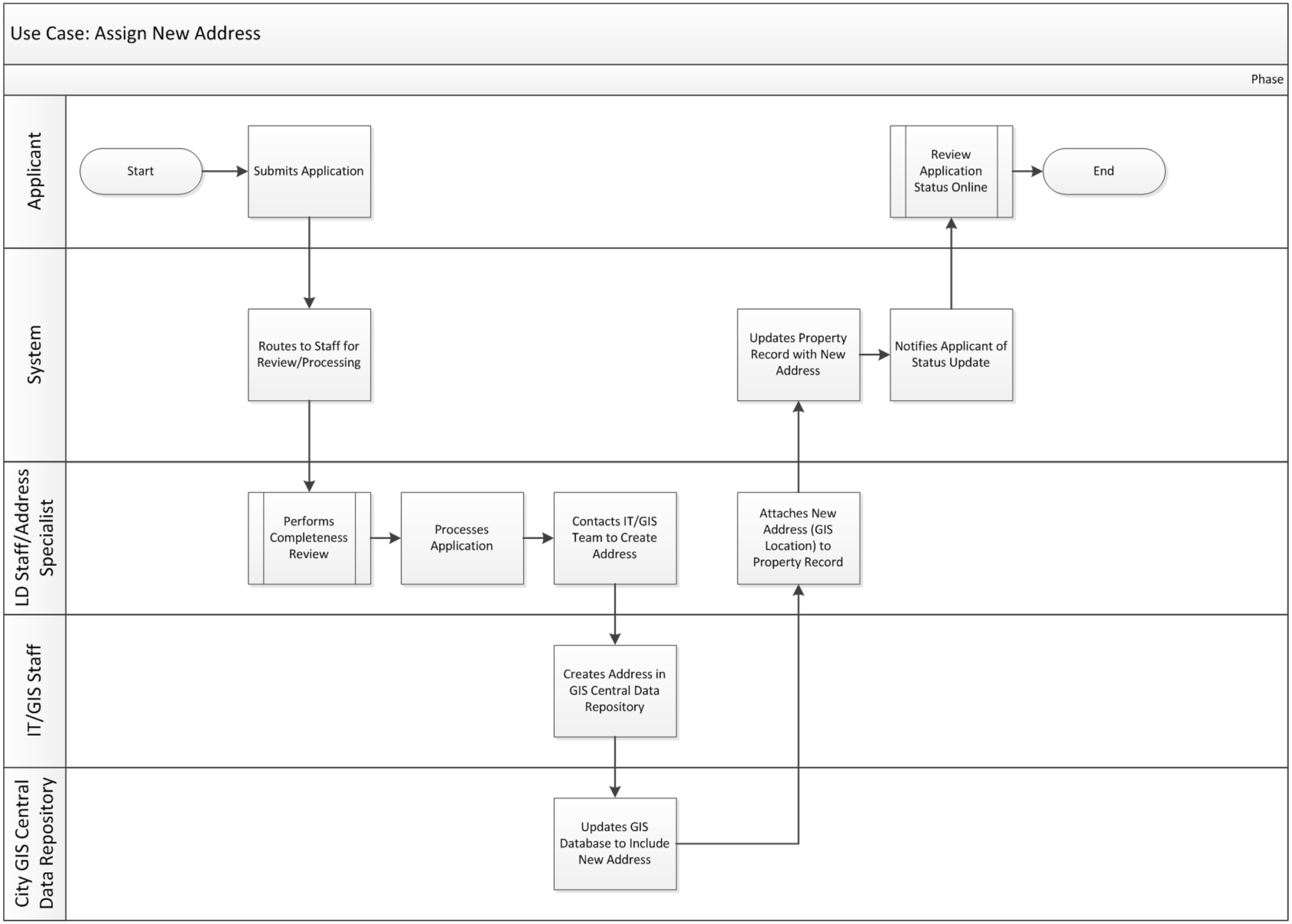
Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Perform Platting

Additional Requirements

- The System shall include addressing tools or allow for integration with addressing tools.
- The System shall integrate with the City's GIS Central Data Repository
- The System shall support communication with external agencies (i.e. CPS, SAWS) on addressing they govern
- The System must support the tracking of street renaming requests and preserve the history and related exhibits
  - Includes whether the request was Applicant or City-initiated
- The System must integrate with or support posting public notices to the City of San Antonio website

Figure 6. Assign New Address Business Process Flow Diagram



1.2.7 Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications

Actor(s):

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of future development activity occurring on a property governed by existing Land Development condition. Any downstream activity (e.g., building permit) occurring on a property (e.g., plat) must comply with any previously granted land development conditions (e.g., zoning).

Trigger Events:

- An Applicant submits a new application (child) that is related to an existing (parent) Land Development application

Precondition:

- A property/lot or parcel exists in the System and has been platted

Post condition:

- The new land development application is linked to the previously existing land development application
- Application will be automatically validated with the tracking of plats and other permit activities through the parent child relationship (e.g., if underlying permit or activities expires than a Rights Determination would expire)
- All DSD staff will be notified according to previously defined business rules of the relationship (e.g., plan review for a building permit would require that existing Master Development Plan be referenced during review to ensure compliance)

Use Case Flow

1. Applicant submits an application (see *Use Case: Submit Application Online*)
   a. As part of the application process the System prompts the Applicant to provide location information.
2. The System shall search for any existing land development applications that are associated with the application, including but not limited to the following criteria:
   i. City Parcel Key(s)
   ii. Bexar County Appraisal Parcel(s)
   iii. Address(es)
   iv. Legal Description(s)
   v. Lot(s)
   vi. Block(s)
   vii. NCB(s)
3. The System automatically links the related development applications through the criteria listed in Step 2 above.

4. The System shall trigger any downstream workflow processes configured in the System related to the parent child relationship (e.g., trigger a Land Development Plan Review).
5. The System shall notify DSD staff according to business rules.

Alternative Flow:

- The System may notify LD Staff that an application has been submitted (see *Use Case: Flag a Property/Lot or Parcel)*

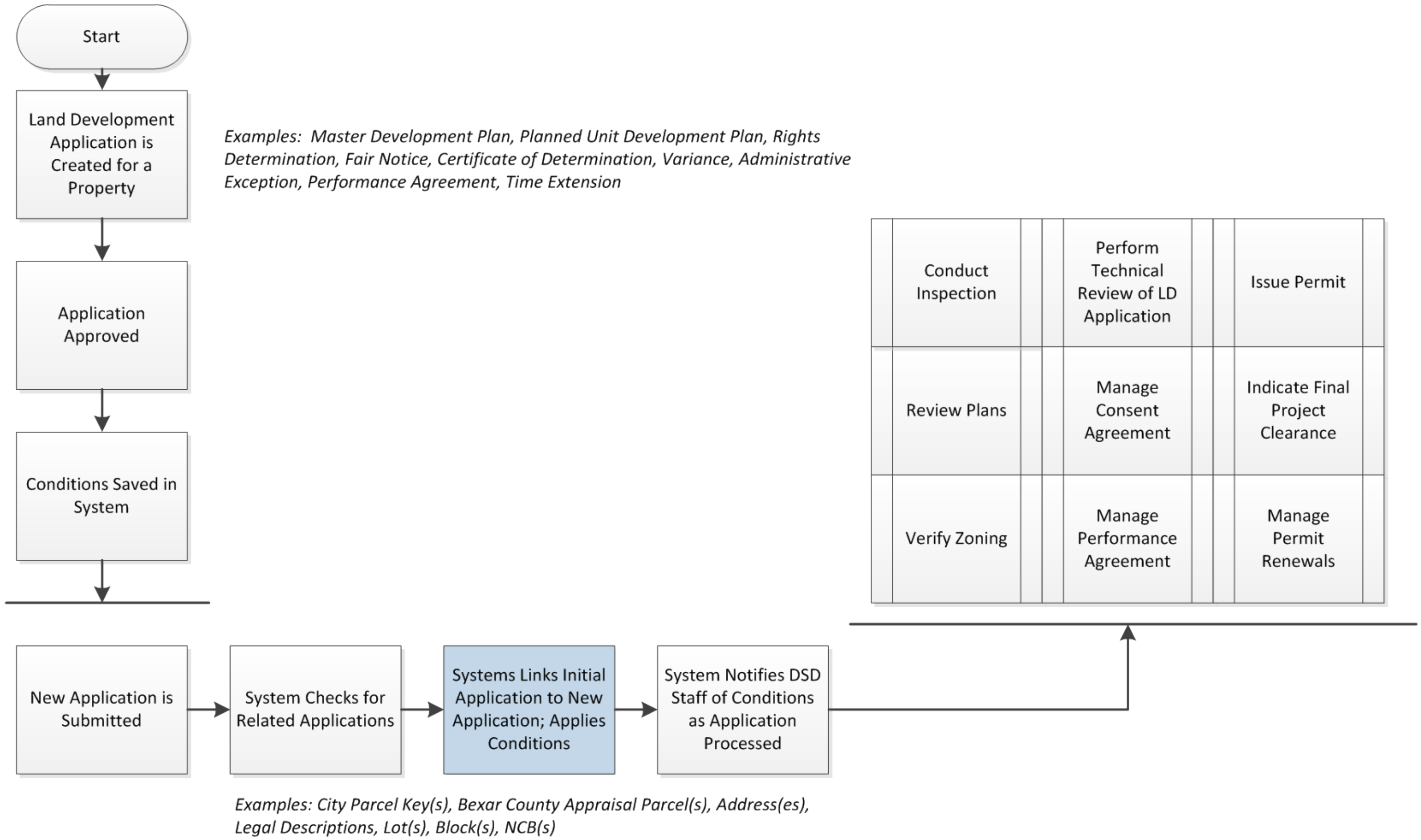
Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Flag a Property/Lot or Parcel
- Use Case: Request Review of Issue

Additional Requirements

- The System shall support the maintenance of parent child relationships related to Inter-local agreements; the boundary of an inter-local agreement should be tracked in the GIS Central Repository any subsequent development within that area should be flagged to comply with the agreement.
- The System shall support the maintenance of parent child relationships related to zoning; the boundary of a zone shall be tracked in the GIS Central Repository and as development applications are submitted in the System, the proposed zoning regulations shall be checked against the proposed land usage in the application and flagged accordingly.
- The System shall support the maintenance of a parent child relationship related to Consent Agreements; A consent agreement is a legal agreement between the City and a developer to meet certain development standards that a geographical area (project) must build to (street standards, tree standards, vesting); Would affect reviewing agencies and their reviews, as well as subsequent inspections.
- The System shall allow for the removal of the parent/child relationship
- The System shall allow for the supervisory override of conditions related to the parent/child relationship.

Figure 7. Manage Parent/Child Relationship Between Existing and New Land Development Applications Process Flow Diagram



1.2.8 Use Case: Monitor Project Validity

Actor(s):

Departmental City Land Development Staff (“LD Staff”)

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of future development activity occurring on a property. This use case focuses on tracking the platting process throughout a project, ensuring that granted rights are continued to be validated during platting, site work, and plan review stages of development. As reviews determine that a project is consistent with the project recognized, the rights and project are continued to be recognized and considered valid.

Examples of scenarios which require project validity include but are not limited to the following:

- ❑ Master Development Plans (MDP’s)
- ❑ Planned Unit Development (PUD’s)
- ❑ Rights Determination
- ❑ Certificate of Determination
- ❑ Inter-local Agreements

Trigger Events:

- Activity occurs on a property with a Land Development condition (e.g., Rights Determination decision)

Precondition:

- A property/lot or parcel exists in the System that has an existing Land Development condition

Post condition:

- System has flagged a review for compliance with the Land Development condition

Use Case Flow

1. Activity occurs on a property with a Land Development condition
2. System notifies personnel that the property has a Land Development condition
3. Staff ensures the activity complies with the Land Development condition. Examples are listed below:
   a. If activity is a Plan Review, the System notifies the Plan Reviewer that a Rights Determination has been granted to the property. Plan Reviewer will review plans and indicate whether the plans comply with the rights granted to the project.
   b. If activity is an Inspection, the System notifies the Inspector that a Rights Determination has been granted to the property. Inspector reviews site work and indicates as part of his or her inspection results whether the site work complies with the rights granted to the project.
4. The System updates the Rights Determination information for the project to indicate that the Rights Determination has been validated or invalidated by the activity.

5. LD Staff is notified of the results and takes any appropriate follow up action with the customer.

Alternative Flow:

- Validity may include an agreement that development activity occurs on the property at least once every 5 years. The System should support the tracking of this requirement as part of the project validation process, as well as trigger downstream workflow processes if rights are not maintained.

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications

Additional Requirements

- The System shall have the ability to monitor expiration dates.

1.2.9 Use Case: Flag a Property/Lot or Parcel

Actor(s):

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of future development activity occurring on a property of particular interest to the division. This is not meant to stop any activity, but to allow staff to monitor the property/lot/parcel and be alerted if development may be occurring.

Trigger Events:

- LD Staff determines a property/lot or parcel exists in the System that warrants monitoring

Precondition:

- A property/lot or parcel exists in the System

Post condition:

- The property is flagged in the System for monitoring
- LD Staff will be notified of any development activity taking place on the property

Use Case Flow

1. LD Staff searches for the property they want to monitor in the System

   a. The System shall allow multiple search options to find the property, including but not limited to the following:
      i. City Parcel Key(s)
      ii. Bexar County Appraisal Parcel(s)
      iii. Address(es)
      iv. Legal Description(s)
      v. Lot(s)
      vi. Block(s)
      vii. NCB(s)
2. The System displays the results of the search criteria entered by LD Staff.
3. LD Staff selects the property(s) he or she wishes to flag in the System.
4. The System displays flagging options for LD Staff, including but not limited to:
   a. Duration of flag, including a permanent option
   b. Type of development activity, including but not limited to:
      i. All activity
      ii. New Permit Filed
      iii. Status Changes
   c. Type of notification (e.g., email)
   d. Who should receive the notification
      i. By role
      ii. By name
5. LD Staff selects flagging options
6. The System saves the flagging options in the System.
7. If future activity takes place on the selected property(s) that meets the criteria selected by LD Staff, the System will notify LD Staff according to the preferences selected.

Alternative Flow:

- The System may not return any search results that meet the criteria entered by LD Staff. LD Staff will need to modify their search criteria and search again.

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Monitor Active Projects
- Use Case: Create Inspection
- Use Case: Conduct Plan Review

Additional Requirements

- The System shall have the ability to remove the flag
- The System shall have the ability to modify the flag
- The System shall have the ability to view flag(s) on a property
- The System will capture information about the flag, such as who flagged the property, date/time stamp of flag, etc.

1.2.10 Use Case: Manage Consent Agreement

Actor(s):

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of a Consent Agreement. A Consent Agreement is a legal agreement between the City and the Developer that governs the developmental standards for a project, such as street standards, tree standards, vesting, etc.

Trigger Events:

- Applicant submits an online application type of Consent Agreement (see *Use Case: Submit Application Online*)

Precondition:

- A property/lot or parcel exists in the System
- Applicant has an Online Portal User Account
- Property is eligible for a Consent Agreement according to predefined business rules in the System

Post condition:

- The conditions of the Consent Agreement are monitored and enforced throughout the lifecycle of property development

Use Case Flow

1. Applicant completes and submits an application for a Consent Agreement (see *Use Case: Submit Application Online)*
2. Application is routed to LD Staff.
3. Application is processed (see *Use Case: Review Application for Completeness*).
4. The System updates the property's record with information regarding the Consent Agreement, including but not limited to the following:
    a. Timing and phasing plan for the proposed development
    b. Plan for the provision of public facilities and services to the proposed development, by phase

   c. The conditions under which the proposed development will be authorized to proceed
   d. The conditions under which approvals or permits will lapse or may be revoked
5. The System shall flag or otherwise indicate a Consent Agreement is associated with the property, allowing users who interact with the property in the System to be aware of the agreement. For example, the System shall support the following:
   a. An inspector performing an inspection on the property (see *Use Case: Conduct Inspection*) should be notified or otherwise view the Consent Agreement and its impact on the inspection
   b. A reviewing authority performing a review (see *Use Case: Review Plans*) should be notified or otherwise view the Consent Agreement and its impact on the review
   c. The System shall support all notifications configured in the System according to predefined business rules.
6. The System shall support a parent child relationship between the existing and any new land development application in the System that may be affected by the Consent Agreement (see *Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications*).
7. Staff indicates activities are valid with Consent Agreement; Activity allowed to proceed on the property.

Alternative Flow:

- If activity is found to be in conflict with the Consent Agreement, Staff may proceed with enforcement actions (see *Use Case: Record Violation),* follow up with the Property Owner/Developer, or take other appropriate action.

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Monitor Active Projects
- Use Case: Create Inspection
- Use Case: Conduct Plan Review

Additional Requirements

- None

1.2.11 Use Case: Manage Performance Agreement

Actor(s):

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of a Performance Agreement. A Performance Agreement is an agreement between the City and the Developer of a subdivision that the required site improvements on a plat will be completed within 3 years of the date of the plat approval by the Planning Commission (see *Use Case: Perform Platting)*. Site improvements may include items such as streets, drainage, water and/or sewer, trees, parks, street lights, Traffic Impact Analysis improvements, and others in the future.

Trigger Events:

- Applicant submits an online application type of Performance Agreement (see *Use Case: Submit Application Online*) to request to have the approved plat recorded before site improvements have been completed.

Precondition:

- A property/lot or parcel exists in the System
- Applicant has an Online Portal User Account
- Property is eligible for a Performance Agreement according to predefined business rules in the System

Post condition:

- The conditions of the Performance Agreement are monitored and enforced throughout the lifecycle of property development

Use Case Flow

1. Applicant completes and submits an application for a Performance Agreement (see *Use Case: Submit Application Online)* to request to have the approved plat recorded before site improvements have been completed.
    a. As part of the application process, the System will prompt the Applicant to indicate a type of performance guarantee, including the following options:
        i. Performance Bond - A single performance bond will be executed by a surety company in an amount equal to the cost estimate of all uncompleted & unaccepted site improvements, as approved by the DSD Director.
            - A performance bond requires a cost estimate to be performed and approved by Review Staff prior to approval/issuance. The System should notify the Applicant of this and disallow the process moving forward until the Cost Estimate is performed.
        ii. Trust Agreement – Similar to a performance bond, but limited to no lower than 20% of the cost estimate.
        iii. Irrevocable Standby Letter of Credit – Limited to 10% of estimated cost.
        iv. Cash or Cashier’s Check – Limited to 10% of estimated cost.
    b. As part of the application process, the System will prompt the Applicant to complete the required form(s). For example, a Performance Bond form will include the Performance Bond Terms and Conditions.
2. Application is routed to LD Staff.
3. Application is processed (see *Use Case: Review Application for Completeness*).

4. The System updates the property's record with information regarding the Performance Agreement, including but not limited to the following:
    a. Site Improvements remaining and percentage complete
    b. Terms and conditions of the performance agreement
    c. Current bond amount
5. The System shall flag or otherwise indicate a Performance Agreement is associated with the property, allowing users who interact with the property in the System to be aware of the agreement. For example, the System shall support the following:
    a. An inspector performing an inspection on the property (see *Use Case: Conduct Inspection*) should be notified or otherwise view the Performance Agreement and its impact on the inspection (e.g., inspector must capture percentage complete of affected site improvements)
    b. LD Staff must be notified if required development has not taken place within agreed upon time frames
    c. The System shall support all notifications configured in the System according to predefined business rules.
6. The System shall support a parent child relationship between the existing and any new land development application in the System that may be affected by the Performance Agreement.

Alternative Flow:

- As the project progresses, Applicants may request for a bond substitution. This means, as work is performed on the project the Applicant may apply for a lesser bond amount. As conditions are met and confirmed through the inspection process (comprised of multiple inspections and follows ups), the inspector will capture percentage complete (see *Use Case: Record Inspection Outcome*). This will allow for an Applicant to get a lesser bond. The Applicant must submit for a new bond before the previous bond can be released.

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Monitor Active Projects
- Use Case: Create Inspection

Additional Requirements

- The System must enforce timelines, expiration dates associated with the bond(s).
- The System shall track the history of development activities on the project (e.g., percentages of completion submitted over time)
- The System shall track the history of bonds for the property

1.2.12 Use Case: Manage Time Extension for Plat & Site Improvements

Actor(s):

Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The purpose of this use case is to assist Land Development staff in maintaining oversight of a Time Extension for Plat & Site Improvements. An Applicant can submit a time extension request to complete plat and site improvements for various reasons (hasn't finished the public improvements within defined time period, hasn't been able to come up with the impact fees/bonds) – see *Use Case: Manage Performance Agreement*. Site improvements may include items such as streets, drainage, water and/or sewer, trees, parks, street lights, Traffic Impact Analysis improvements, and others in the future.

Trigger Events:

- Applicant determines he or she will not be able to continue to meet the requirements of the Performance Agreement and submits an application for a Time Extension (see *Use Case: Submit Application Online*).

Precondition:

- A property/lot or parcel exists in the System
- Applicant has an Online Portal User Account
- Applicant has an existing Performance Agreement (see *Use Case: Manage Performance Agreement*)
- Property is eligible for a Time Extension according to predefined business rules in the System

Post condition:

- The request for the Time Extension is reviewed and evaluated
- The decision of the request is captured by the System
- Any outcome or downstream workflow affected by the decision is enforced by the System

Use Case Flow

1. Applicant completes and submits an application for a Time Extension for his or her existing Performance Agreement (see *Use Case: Submit Application Online* and *Use Case: Manage Performance Agreement)* to request a time extension to complete the required site improvements.
    a. As part of the application process, the System will prompt the Applicant to select the property and performance agreement affected by the Time Extension.
    b. As part of the application process, the System will prompt the Applicant to identify the percentage completed and improvements remaining.
2. Application is routed to LD Staff.
3. Application is processed (see *Use Case: Review Application for Completeness*).

4. Application is routed for review by required Reviewing Authorities (SAWS, Land Development).
5. Reviewing authorities are notified of application for review.
6. Reviewing authorities access the System and review the application.
7. Reviewing authorities capture their comments in the System.
8. LD Staff captures their Staff Recommendation in the System (see *Use Case: Document Staff Recommendation*).
9. LD Staff places the item on the agenda for the next scheduled Planning Commission meeting (see *Use Case: Build Agenda for Review*).
10. The review is conducted and the result is captured in the System (see *Use Case: Conduct Review*).
11. The System updates the status of the performance agreement with the new timeline.

Alternative Flow:

- None

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Monitor Active Projects

Additional Requirements

- The System must enforce timelines, expiration dates associated with the time extension.
- The System shall track the history of development activities on the project (e.g., percentages of completion submitted over time)
- The System shall track the history of time extensions on the project.

1.2.13 Use Case: Manage Traffic Impact Analysis Process

Actor(s):

- Primary: Departmental City Land Development Staff ("LD Staff")
- Secondary: Plan Reviewer ("Reviewer")

Purpose and Objectives:

The purpose of this Use Case is to manage the Traffic Impact Analysis (TIA) process. Any time a commercial development that is renovating or changing the use of a property that may result in an increase of traffic (cars entering/exiting) to a particular threshold for that land use, the Applicant may be required to conduct and submit the results of a TIA study. The TIA captures information such as how many trips are generated during peak hours, proposed usage, how many trips the new usage may generate, and the delta between the proposed usage and existing usage.

Trigger Events:

- The TIA requirement is triggered during the application process, such as a request for rezoning (see *Use Case: Submit Application Online)* OR as part of a technical review of a plat (see *Use Case: Review Plans*)

Precondition:

- An application or existing project is in process in the System

Post Condition:

- The application/plans have been reviewed to determine if a traffic study is required.
- If a traffic study is required, it is processed and recorded in the System.

Use Case Flow:

1. Applicant is notified to complete a TIA Threshold worksheet, as part of the application process (see *Use Case: Submit Application Online*) or per request from a Reviewer or LD Staff (see *Use Case: Review Plans*).
2. The Applicant logs into the online portal and selects to complete and submit the TIA Threshold worksheet.
3. The worksheet is routed to LD Staff/Reviewer for review.
4. LD Staff/Reviewer reviews the worksheet and records the outcome of their review:
    a. TIA report is required
    b. TIA report is *not* required as the traffic generated by the proposed development does not exceed the threshold requirements
    c. TIA has been waived; include reason(s).
    d. The System also logs who performed the review and date/time of review.
5. The Applicant is notified of the completion of the review and logs into the online portal to view the results.
    a. If no further action is needed from the Applicant (TIA not required, TIA waived), the process ends.
6. If a TIA report is required, Applicant will meet with LD Staff to scope out the traffic study.
7. The Applicant conducts the full TIA report (outside of the System).
8. The Applicant logs into the portal and submits the TIA report.
9. The TIA report is reviewed as part of the overall technical review (see *Use Case: Review Plans*). The results are included in the overall review and approval process and may affect downstream workflow activities, such as platting, building, etc.

Alternate Flows:

- The Applicant may decide to submit the TIA worksheet or study in person or through the mail. The Plan Reviewer or Intake Staff who receives the study will then scan the documents and upload any files into the System so that it is associated with the project.

Associations to other Use Cases:

- Use Case: Review Plans
- Use Case: Submit Application Online
- Use Case: Request Additional Information from Applicant

Additional Requirements:

- The System will interface with the City's existing GIS System to allow the tracking of the traffic study.
- The System will allow for a history of traffic studies performed at a location to be preserved and viewed.
- The System shall have the capability to capture electronic signature

1.3 Permitting Use Cases

Once an application has been submitted by an Applicant, City Employees will review it for completeness, compliance, and additional information that may be required. Once the application is approved, the City can issue a permit. The City of San Antonio issues various types of permits. These include the issuance of permits to homeowners and licensed contractors to obtain the proper permits for construction development projects. Other permit types may allow an individual or company to service the City of San Antonio (e.g., vehicle for hire), allow for new/renewal alarm permits and alarm fees (residential/commercial/gated/government), or perform an activity within the City of San Antonio that occurs within the public right-of-way (e.g., parade).

Once the permit is issued, the requested activity can begin. Typically, a number of validation steps must be completed before a Certificate of Occupancy, or other final project approval documentation, can be issued. These include inspections and meetings between Applicants and City Staff, etc. Once all validation and oversight steps are completed, the project can be granted final clearance (e.g., Issuance of COO). The System then enrolls the project in periodic review cycles as necessary (e.g., permit renewal).

1.3.1 Use Case: Issue Permit

Actor(s):

- Primary: Departmental City Permit Staff (or "Permit Staff")
- Secondary: Applicant

Purpose and Objectives:

The purpose of this use case is to assist Permit Staff in the process of issuing a permit. The City of San Antonio issues various types of permits. This use case only focuses on permits in scope for the Hansen-ECCO replacement project. These include the issuance of permits to homeowners and licensed contractors to obtain the proper permits for construction development projects. Other permit types may allow an individual or company to service the City of San

Antonio (e.g., vehicle for hire), or perform an activity within the City of San Antonio that occurs within the public right-of-way (e.g., parade).

Once an application has been approved, Permit Staff will issue a permit. The issuance of the permit allows the requested service to begin, whether it is the initiation of construction development on a property or an individual or company providing a service. The issuance of the permit may automatically trigger downstream activities supported by business rules driven workflow, such as the creation of an inspection.

Trigger Events:

- A completed application has been submitted and processed successfully.
- All required plan review(s) and/or other validations for that project/permit type have been completed in a successful manner.
- Application has been approved.

Precondition:

- All prerequisite clearances have been satisfied in the system.
- All required plans and documents from the application process, plan review process, and other relevant workflow periods defined for the service have been satisfactorily provided, reviewed, and approved.

Post condition:

- The project/application is approved, allowing for service for which the application was for to begin.
- If authorized for that permit type, the Applicant has printed a copy of his or her approval documents from the portal (i.e. permit).
- The System enrolls the permit in a periodic renewal cycle (e.g., annual) to collect any required annual payments (see *Use Case: Manage Permit Renewals*).

Use Case Flow

1. The System updates the project/application to a status that reflects all outstanding clearances required have been successfully completed (e.g., “Pass”) based on workflow triggered from completed plan reviews, and other required clearances attached to the project.
2. The System notifies appropriate Permit Staff (e.g., Supervisor) that the project has met all requirements for permit issuance.
3. Permit Staff performs a final review of the application and approves the project for final clearance (e.g., permit issuance).
4. The System notifies the Applicant that their application has been approved.
5. The Applicant logs into the online portal.
6. The System displays information relevant to the user, including but not limited to a list of approved applications and issued permits.
7. The Applicant views their approved application and prints the associated approval documents, which may include items such as permit, receipts, permits, and/or official letters from the City.

a. Some document types may be required by the City to be picked up by the Applicant in person from the San Antonio DSD Office or other location. If this is the case, the System shall provide the Applicant detailed instructions on how to obtain their approval document.

8. The System shall initiate any downstream activities supported by business rules driven workflow, such as the creation of an inspection (see *Use Case: Create Inspection*), enrollment in renewal program (see *Use Case: Manage Permit Renewals*), or other related activities.

Alternative Flow:

- If Plan Reviewers, Intake Staff, etc. have provided conflicting approvals, the System shall prevent approval until the resolution is resolved, and notify the personnel involved to resolve the conflict (see *Use Case: Monitor Active Projects*)

Associations to other use cases:

- Use Case: Submit Online Application
- Use Case: Monitor Active Projects
- Use Case: Manage Permit Renewals
- Use Case: Create Inspection
- Use Case: Review Plans for Compliance and Record Outcome

Additional Requirements

- The System shall have the ability to capture electronic signature

1.3.2 Use Case: Monitor Active Projects

Actor(s):

City Permit Staff Supervisor (or “Supervisor”)

Purpose and Objectives:

The purpose of this use case allows a Supervisor to proactively monitor and manage active projects. Active projects are those projects who have completed the application process, have been issued permits, and are currently in the process of moving towards final project completion (see *Use Case: Indicate Final Project Clearance*), such as acquiring a Certificate of Occupancy.

Typically, a number of validation steps must be completed before a Certificate of Occupancy, or other final approval documentation, can be issued. The steps required will be dependent upon, and vary, according to permit and project types. These include plan review changes, inspections, and meetings between Applicants and City Staff, etc. This process is supervisory, and involves ensuring all required steps are completed satisfactorily, as well as ensuring they are completed in a timely manner according to business rules and pre-defined performance measures.

Trigger Events:

- A Supervisor desires to view information about active projects for his or her department.

Precondition:

- The Supervisor has a user profile in the System.
- The System has pre-defined service levels and built-in triggers for performance monitoring to feed the Supervisor dashboard.
- The System has pre-defined profiles for the Supervisor such as project type, assigned staff, etc.

Post condition:

- A Supervisor has effectively managed the active projects queue.

Use Case Flow

1. The Supervisor logs into the System.
2. The System displays information relevant to the Supervisor, including but not limited to information about the active projects currently assigned to the workforce he or she manages.
3. The System shall provide visual cues for potential issues with active projects (e.g. aging of outstanding tasks)
4. The System shall provide the functionality to display the project information in a manner that compares current performance metrics of the activity on a project against typically acceptable performance (such as Inspection A typically takes 3 days and is now beyond 5 days and still pending completion)
5. The Supervisor shall have the capability to drill-down into specific sections of the application and inspection as necessary to research current status.
6. The Supervisor reviews the workloads and shall have the capability to make adjustments, such as re-assigning tasks.
7. The System shall provide a variety of means for the Supervisor to resolve any performance issues, including but not limited to the following:
   a. Re-assign tasks or workloads as a whole
   b. Send a communication to the Applicant
   c. Record an internal note on the application
   d. Request additional information from Applicant (See *"Request Additional Information From Applicant"* Use Case)
   e. Update the application workflow or status to indicate escalation and action by other parties
8. The System shall notify the Supervisor if any assignments conflict with pre-defined business rules, such as inspection type or workload maximums
9. The Supervisor shall have the ability to override any notification and continue with the assignment

10. Once the Supervisor has completed all actions related to monitoring and managing the workload of his assigned workforce, the System shall save all changes and if appropriate, update the queues for any affected staff.

Alternative Flow:

- A source external to the system, such as a phone call from an Applicant, prompts the Supervisor to review the project record for a particular issue.
- A source internal to the system (e.g., Inspection Supervisor) notifies the DSD Supervisor that a particular task has an issue that needs the attention of that Supervisor.
- The Supervisor coordinates with outside organizations to facilitate the issue (e.g., SAWS)
- A predefined service level overrun triggers an automatic notification to the Supervisor

Associations to other use cases:

- Use Case: Indicate Final Project Clearance
- Use Case: Issue Permit

Additional Requirements

- The System shall have the ability to capture electronic signature
- The System shall support Supervisor Overrides of all workflow aspects of application processing, including overriding a denial, according to predefined business rules

1.3.3 Use Case: Request Review of Issue

Actor

Customer

Purpose and Objectives

This Use Case outlines the process of a Customer to requesting an opportunity to meet with a governing authority to discuss an issue. This scenario may arise from a variety of situations, such as appeals of a violation or rejection of an application, reviews of plans, or requests for rezoning, exceptions, variances, code modifications, etc. The System will prompt the Customer to provide the required information for the review type. The System will allow the Customer to communicate with a City contact, request a review date, and record the date in the System once the date has been confirmed. Types of reviews may include a hearing before a hearing officer, a Board Review (e.g., Board of Adjustment), City Council, or a meeting with a Departmental Supervisor, depending on the type of issue under review.

Trigger Events

- Customer has received a decision or action from the City that he or she wishes to appeal.

Precondition

- Customer has a user account in the new System.
- Customer has an existing project in the System.

Post condition

- Review has been scheduled and all required parties have been notified.

Use Case Flow

1. The Customer logs on to the online portal.
2. The System displays information relevant to the user, including but not limited to his or her existing, active projects.
3. The Customer selects to request a City Decision/Action on his or her project. Examples include, but are not limited to the following:
    a. Code Modification Request
    b. License Application Rejection
    c. Permit Application Rejection
    d. Inspection Rejection
    e. Notice of Violation
    f. Citation
    g. Variance
    h. Special Exception
    i. Appeal of Administrative Decision
    j. Non-Conforming Use
    k. Request for Rezoning
    l. Address Change
    m. Land Development Application (i.e., MDP, PUD)
4. The System shall display a structured method to intake the request, prompting the Customer to provide information and supporting documentation according to the Review Type.
    a. The System shall support customized templates per review type to prompt the Customer to provide the information required to process that review (e.g., Code Modification Request would require the Customer to address each code in question and how he or she plans to meet or exceed the intent of the code.)
5. The System shall allow the Customer to request a review date where the Customer will meet with City personnel. The System will capture review information, including:
    a. Type of review required.
        i. Types of reviews can include a meeting with departmental supervisors, a public hearing before a Board, a hearing with a hearing officer, etc.
    b. Preferred dates or date range based on the review type.

   c. Any required time periods or deadlines driven by ordinance.
      i. The System will enforce any business rules regarding the scheduling of hearings (e.g., limit of number of hearings in a day).
      ii. Also, availability of required personnel via calendaring functionality
6. The Customer completes and submits the request.
7. The System shall route the request to the appropriate City personnel.

Associations to other Use Cases

- Use Case: Record Violation
- Use Case: Submit Online Application
- Use Case: Check Application Status
- Use Case: Manage Final Project Clearance
- Use Case: Manage Complaints
- Use Case: Conduct Inspection
- Use Case: Document Staff Recommendation
- Use Case: Perform Technical Review of Land Development Application

Alternative Flow

- If the personnel required to be present at the review meeting (e.g., external Hearing Officer) does not have access to the System, a designated departmental point of contact will coordinate with the individual to get the review scheduled and update the System accordingly.
- The System may automatically trigger a review (e.g., hearing), and notify the customer to select a hearing date, based on pre-defined business rules (e.g., If an application for a license by a new company has been denied and business rules dictate and automatic review of the decision).
- City personnel may decide to initiate a review and place the issue on an agenda (e.g., Dangerous Premises finding referred to Building Standards Board)
- A review may be automatically triggered by the System and flagged to be placed on the agenda for an upcoming review (e.g., Technical Review completed) – see *Use Case: Perform Technical Review of Land Development Application*
  - ❑ This may also trigger a Staff Recommendation (see *Use Case: Document Staff Recommendation)*
- For some appeals, an Applicant should be required to review the ordinance related to the issue at hand (e.g., rejection of a permit for an event). The ordinance would provide the Applicant information related to the rejection, and prompt the Applicant to acknowledge he or she has read the ordinance.

Additional Requirements to this Use Case

- The System shall have the capability to generate review notices and agendas, including:
  - Standard letters
  - Electronic notifications
  - Post online
- The System shall have the capability to capture electronic signature

1.3.4 Use Case: Schedule Review

Actor

City Personnel responsible for reviews of customer appeals (“Review Staff”)

Purpose and Objectives

This Use Case outlines the process of a scheduling a time for Customer to meet with a governing authority to discuss an issue. This scenario may arise from a variety of situations, such as appeals of a violation or rejection of an application, reviews of plans, or requests for exceptions, variances, code modifications, etc. The System will allow for automatic scheduling of a review, or manual scheduling of a review, according to business rules. Once the review has been scheduled, the status of the request will be updated in the System and all parties required to participate in the review will be notified.

Trigger Events

- Customer has submitted a request for a review (see Use Case: Request Review of Issue).

Precondition

- Customer has a user account in the new System.
- Customer has an existing project in the System for which he or she has submitted a request for review.

Post condition

- Review has been scheduled and all required parties have been notified.

Use Case Flow

1. Review Staff reviews the request and confirms (or modifies, if appropriate) the requested review date in the System.
2. The System creates a record of the upcoming event in the System
3. The System prompts Review Staff to select and/or confirm the participants required for the review.
4. The System shall automatically identify any parties that must be notified of the review according to business rules (e.g., Board Members).
   a. The System shall allow parties to be manually added to the review.
5. Review Staff selects to invite and notify parties of the event.

a. The System shall have the capability to notify all parties that must be present for the hearing.

b. The System shall have the capability to create a “Review Package” containing relevant information and instructions for the hearing, and route to selected participants.

   i. The System shall grant access to related documentation, such as allowing City personnel invited to the review to access the record(s) for review or providing information to the Customer via the online portal.

6. Invited participants receive notice of and information relating to the review.

Associations to other Use Cases

- Use Case: Request Review of Issue
- Use Case: Conduct Review

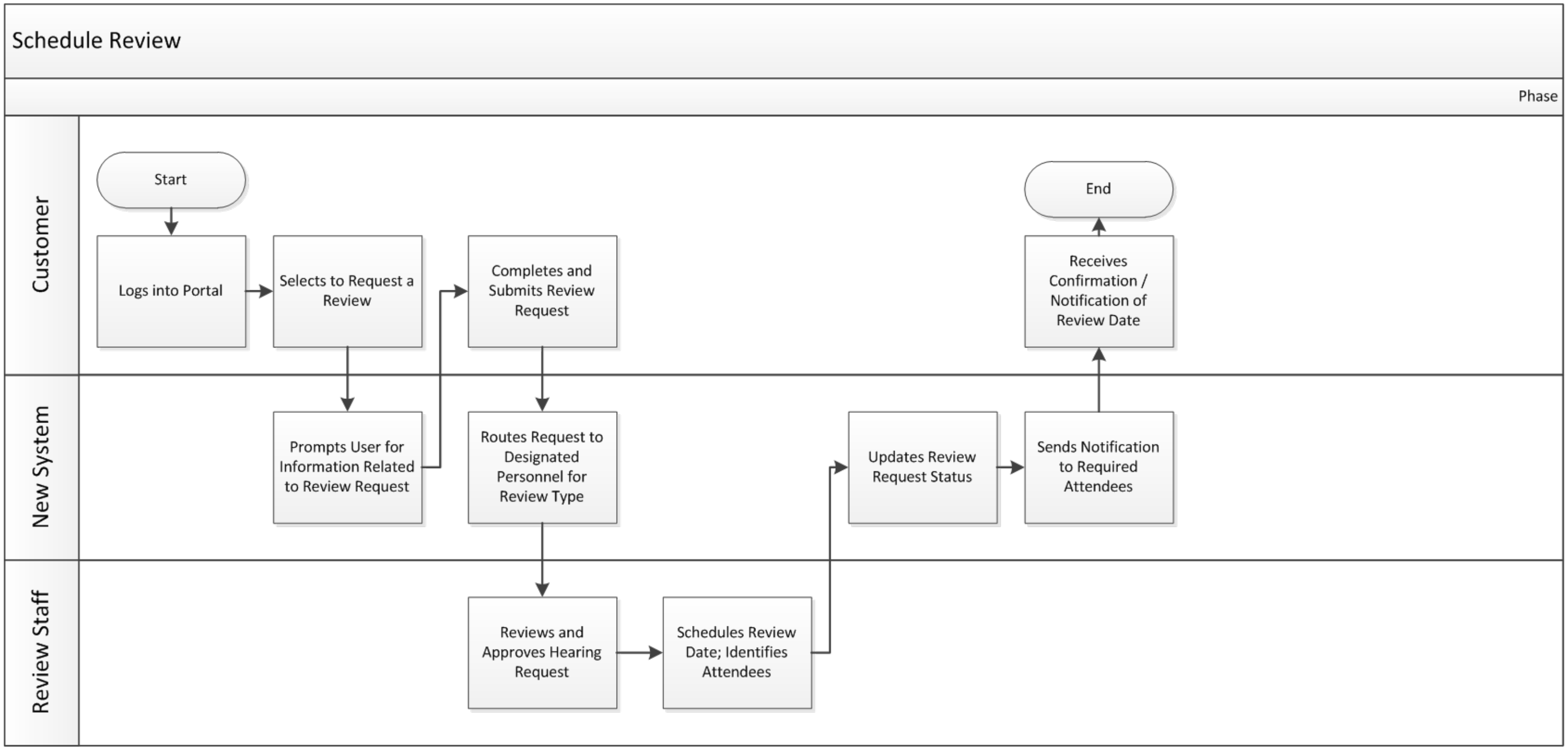
Alternative Flow

- Review Staff may reject Customer’s request for a review. The System will prompt Review Staff to enter information related to the rejection, such as the reason for rejection, and communicate the decision to the Customer.
- The System shall allow the rescheduling of reviews.
- The System shall allow the cancelation of reviews.
- If the personnel required to be present at the review meeting (e.g., external Hearing Officer) does not have access to the System, a designated departmental point of contact will coordinate with the individual to get the review scheduled and update the System accordingly.
- The System may automatically trigger a review (e.g., hearing), and notify the customer to select a hearing date, based on pre-defined business rules (e.g., If an application for a license by a new company has been denied and business rules dictate and automatic review of the decision).

Additional Requirements

- The System shall have the capability to generate review notices and agendas, including:
  - Standard letters
  - Electronic notifications
  - Post online
- The System shall have the capability to capture electronic signature

Figure 8. Schedule Review Business Process Diagram



1.3.5 Use Case: Conduct Review

Actor

- Primary: City Personnel responsible for managing customer appeals ("Review Staff")
- Secondary: City Personnel responsible for performing reviews of customer appeals ("Review Officer"), which will vary according to review type. Examples of personnel include Board Members, Departmental Supervisors, review officers, etc.

Purpose and Objectives

Once the review request has been submitted and the review has been scheduled, the review will be conducted by a Review Officer and the appropriate parties. The Review Officer will make his or her decision, and Review Staff is responsible for updating the System with the results, comments, and/or conditions. Review Staff ensures that the process is completed and performed in a timely manner, that the Customer is informed of the decision/outcome of the review, and that all conditions derived from the outcome of the review are reflected in the System.

Trigger Events

- Scheduled review date has occurred and review takes place.

Precondition

- Review has been scheduled (see Use Case: Schedule Review)

Post condition

- Comments, and results of review have been recorded in the System
- Decision with conditions, if applicable, has been captured in the System

Use Case Flow

1. All required parties attend review (outside of System).
2. Review Officer(s) conduct review and issue a decision regarding the Customer's request for review and appeal of previous City action/decision.
    a. Review Staff may attend the review or be informed of the outcome of the review, and provided any supporting documentation, following the review meeting.
3. Review Staff logs into the System.
4. The System displays information relevant to the user, including but not limited to any cases that have reviews that need to be updated with the review outcome.
5. Review Staff selects the appropriate case, and selects to record the review decision for that case.
    a. The System shall facilitate a structured method to record the review outcomes, including:
        i. Confirmation of conditions proposed through the review if applicable
        ii. Addition of new conditions determined in the reviews
        iii. Comments/concerns raised during the course of the review

    iv. Review Officer(s) responsible for review and individual recommendations/votes, if applicable
    v. Scanning of any documentation produced from the review, including signatures from Review Officers making decisions and/or recommendations.

6. The Case Manager completes the template and the System shall add the conditions, if applicable, to the associated project, license, location, etc. related to the case. Examples of conditions include but are not limited to the following:
    a. Approved Code Modification
    b. License Application Approval
    c. Permit Application Approval
    d. Reversal of Violation, Citation
    e. Variance
    f. Special Exception
    g. Appeal of Administrative Decision
    h. Non-Conforming Use
    i. Updating of GIS Information
        i. Address changes
        ii. Zoning changes
7. The System may generate formal documentation related to the review, such as a Letter of Decision.
    a. The System shall provide a template for the letter that can be customized by the Review Staff
8. The Review Staff selects who the Letter of Decision should be sent to.
    a. The System shall provide a list of recipients based on pre-set parameters (500ft radius, adjacent properties, etc.)
    b. The System shall also publish the LODs on the online portal.
    c. The System shall allow to send notification to other selected parties (i.e. email, printed documentation that is later mailed)
9. The Review Staff sends Letter.
10. The System updates the status of the review.

Associations to other Use Cases

- Use Case: Schedule Review
- Use Case: Request Review

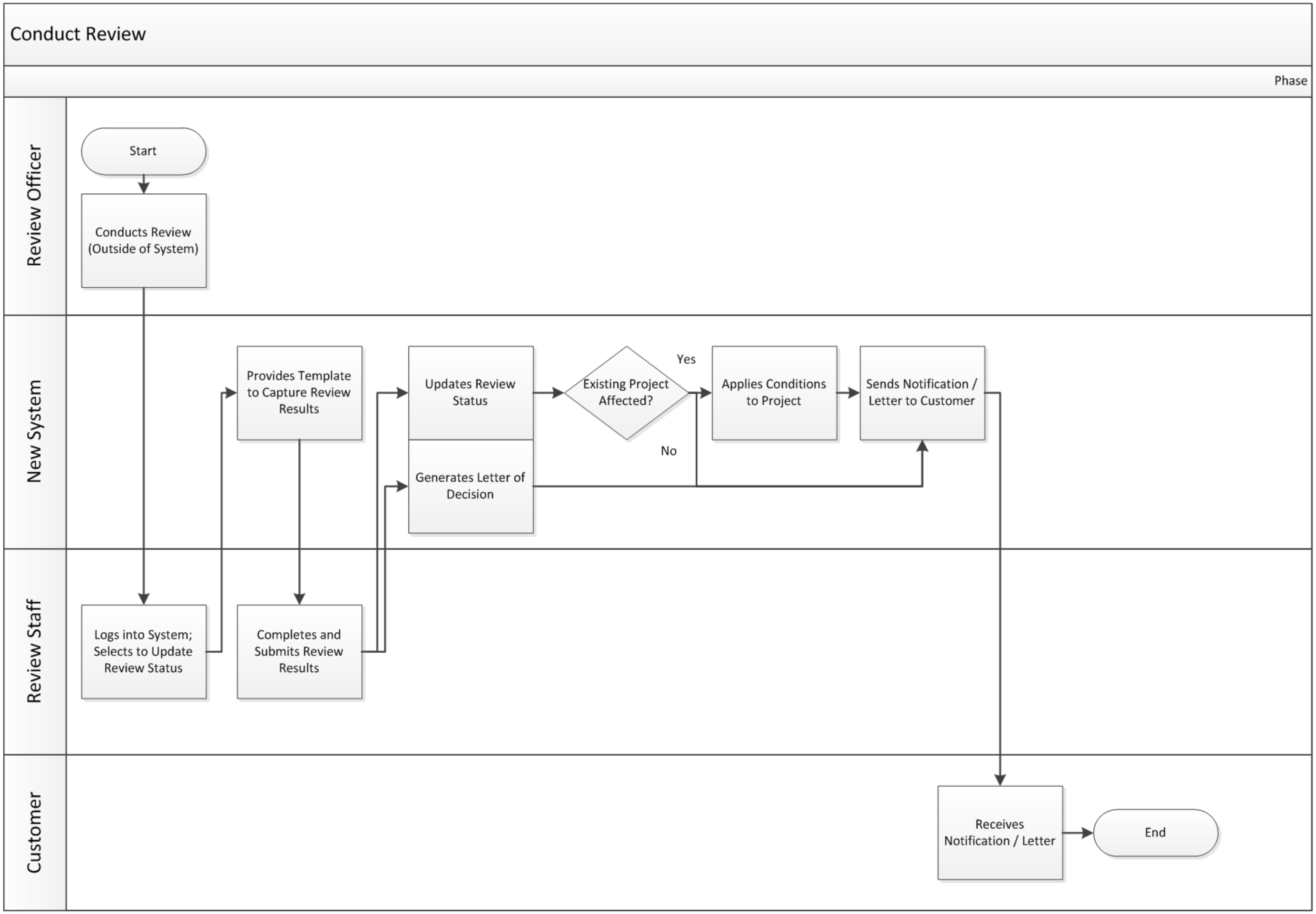
Alternative Flow

- The outcome of the review may be a denial of the Customer's appeal of the action/decision performed by the City. Reasons related to the denial of the appeal would be captured in the System and associated Letter of Decision, which would be sent to the Customer.

Additional Requirements

- The System shall have the capability to capture electronic signature
- The System shall support appeals conducted by City Council (Appeals of the Building & Fire Advisory Board and Board of Appeals)
- The System shall support appeals conducted by Bexar County District Court (Appeals of the Board of Adjustment)

Figure 9. Conduct Review Business Process Flow Diagram



1.3.6 Use Case: Indicate Final Project Clearance

Actor(s):

- Primary: Departmental City Permit Staff (or “Permit Staff”)
- Secondary: Applicant

Purpose and Objectives:

The purpose of this use case is to assist Permit Staff in the process of validating that all required clearances have been met from each participating agency in the overall project process and performing final project approval activities, such as notifying all relevant parties of project permit issuance, initiating final Applicant invoicing, and/or triggering bond release. The steps required will be dependent upon, and vary, according to permit and project types.

Currently, each of the City’s participating division performs tasks that ultimately result in clearances for the overall project. There are multiple methods to provide these required clearances, such as a “Certificate of Occupancy” from Building & Safety or a “Certificate of Appropriateness” from the Office of Historic Preservation.

Trigger Events:

- A completed application has been submitted and processed successfully.
- All required plan review(s) and/or inspection(s) for that project/permit type have been completed in a successful manner.

Precondition:

- All prerequisite inspections and clearances have been satisfied in the system.
- All required plans and documents from the application process, inspection process, and other relevant workflow periods defined for the service have been satisfactorily provided, reviewed, and approved.

Post condition:

- The project/application is approved, final project invoicing and/or bond releases triggered, and all relevant parties have been notified.
- If authorized for that permit type, the Applicant has printed a copy of his or her approval documents from the portal (i.e. permit, certificate, letter of authority).
- The System enrolls the project in a periodic renewal cycle (e.g., annual) to collect any required annual payments (see *Use Case: Manage Permit Renewals*).

Use Case Flow

1. The System updates the project/application to a status that reflects all outstanding plan reviews and inspections required have been successfully completed (e.g., “Active”) based on workflow triggered from completed inspections, plan reviews, and other required clearances attached to the project.
2. The System notifies appropriate Permit Staff (e.g., Supervisor) that the project has met all requirements for final project clearance.
3. Permit Staff performs a final review of the project and approves the project for final clearance (e.g., Certificate of Occupancy issuance).

4. The System notifies the Applicant that their application has been approved.
5. The Applicant logs into the online portal.
6. The System displays information relevant to the user, including but not limited to a list of approved projects.
7. The Applicant views their approved project and prints the associated approval documents, which may include items such as receipts, permits, zoning map, official letters from the City, and/or certificates (e.g., Certificate of Occupancy).
    a. Some document types may be required by the City to be picked up by the Applicant in person from the San Antonio DSD Office or other location. If this is the case, the System shall provide the Applicant detailed instructions on how to obtain their approval document.
8. The System shall initiate any outstanding application or project tasks, such as issuing a final fee invoice to the Applicant, triggering a deposit release to an Applicant, triggering a bond release, or updating the application workflow and status that indicates the application is completed.
    a. If City personnel need to initiate any final project tasks, such as final invoicing or bond releases, they may do so.
    b. The System shall have the capability to send electronic notifications (e.g. text, email) to relevant parties, such as the Applicant, associated contractors, and other participating agencies.
    c. The System shall store and archive an original copy of the approval document.

Alternative Flow:

- If Plan Reviewers, Inspectors, Intake Clerks, etc. have provided conflicting approvals, the System shall prevent approval until the resolution is resolved, and notify the personnel involved to resolve the conflict (see Use Case: Monitor Project).
- In some scenarios (e.g., a large multi-use facility with multiple owners, leases) customers may want to begin occupying spaces within the building as they are finished – a phased approach to construction. The System needs to support segmented approvals for occupancy. For example, a sprinkler system may be associated with the “parent” – the building – but allow for conditional approvals for the “child” permit.
- The System may prevent issuance of a Certificate of Occupancy according to various conditions configured in the System according to predefined business rules, as well as through maintenance of the parent child relationship between a property and subsequent building development activities (see *Use Case: Maintain Parent/Child Relationship Between Existing and New Land Development Applications*). For example, the COO should not be issued if the property has not been platted. The Applicant and Permit Staff would be notified and further coordinate to resolve the issues.

Associations to other use cases:

- Use Case: Manage Permit Renewals
- Use Case: Conduct Inspection and Record Outcome

- Use Case: Review Plans for Compliance and Record Outcome

Additional Requirements

- The System shall have the ability to capture electronic signature

1.3.7 Use Case: Manage Permit Renewals

Actor:

Departmental City Permit Staff (or “Permit Staff”)

Purpose and Objectives:

The purpose of this use case is to outline the process of administering permit renewal notices.

Trigger Events:

- Existing permit is due for renewal

Precondition:

- A permit is a candidate for renewal according to pre-defined business rules (e.g., crosses a date-based threshold to initiate renewal notifications)

Post condition:

- A permit has been renewed for another term.

Use Case Flow

1. Permit Staff accesses his or her account.
2. The System shall display information relevant to the user, including but not limited to all pending permit renewals.
3. Permit Staff reviews permits due for upcoming renewal and selects to send notifications to permit holders.
    a. The System shall have the capability to automatically generate renewal letters for periodic renewal batches of permits.
    b. The System shall have the capability to send electronic notifications to the permit holder, or other designated parties, as reminders to renew their permit in addition to printed letters.
    c. The System shall have the capability to generate an access code and include it in the renewal notice for the Permit Holder to log on to the online portal with in lieu of maintaining a username/password.
4. The System updates the Project Record with the time/date the letters were generated.
5. Permit Staff collects the printed notification letters and mails them (outside the System).
    a. The System shall have the capability to associate batch notification letters to the project record for storage in an electronic document management system.
    b. The System shall have the capability to integrate with a batch printing system for automatic generation and printing of notices

Associations to other use cases:

- Use Case: Indicate Final Project Clearance

Alternative Flow:

- The System shall have the capability for a permit holder to electronically register with the portal to forego mailed renewal letters in favor of electronic renewal notifications that are sent to the permit holder’s contact email address.

Additional Requirements:

- The System shall have the capability to define renewal periods for categories of permit types.
- The System shall have the capability to automatically process batches of permit renewal notifications.
- The System shall have the capability to generate notices on demand
- The System shall have the capability to generate notices in monthly, bimonthly, and annual batches.
- The System shall have the capability to configure fees according to a pre-defined fee schedule.
- The System shall have the capability to generate customizable templates for notices
- The System shall have the capability to prevent certain parts of the template from editing (e.g., city seal).
- The System shall have the ability to capture electronic signature
- The System shall support Supervisor Override capability for permit renewal of any kind.
- The System shall have the ability to capture true false alarm counts, burglary, robbery, etc. to alarm permit account (information is provided from SAPD CAD system).
- The System shall have the ability to apply true false alarm counts, burglary, robbery, etc. to alarm permit account (information is provided from the SAPD CAD system).
- The System shall integrate with the GEO Validation database from the SAPD CAD system
- The System shall have the ability to capture address jurisdiction verification and senior homestead exemption (provided through the BCAD)

1.4 Licensing Use Cases

This set of Use Cases allows an Applicant to manage the process of applying for a license through the City. This process includes submitting an application, scheduling examinations if required, as well as the renewal process. From the perspective of a City Employee the Use Cases allow the management of exam schedules, reviews, and the management of the renewal process.

1.4.1 Use Case: Submit License Application Online

Actor:

License Applicant (or “Applicant”)

Purpose and Objectives:

This Use Case describes the process of an Applicant completing an initial license application via the online portal.

Once a customer has selected a License application from the available Services (see *Use Case: Select a Service*), the new System will provide a structured approach to determine what information is required from the Applicant to process the application.

- Through a decision tree process or similar, the System will determine what information, documents, exams and/or education credits, and performance tests are required and prompt the customer to enter the sum total of the information required for the application for that license type.
- Workflow within the new System will route the various application components to the personnel and departments responsible for review, and ensure all required application components are satisfied prior to issuing a license, application, or renewal.
    - The application process will build on information previously entered and stored in the system, and will include an automated check for completeness of the application and all necessary supporting documents.

Trigger Events:

- The Applicant chooses to submit an application for a license application through the online portal.

Precondition:

- The Applicant has a user account for the online portal.

Post Condition:

- The application has been successfully submitted, and the System has routed the application to the appropriate department for processing.

Use Case Flow:

1. The Applicant access the online portal.
2. The Applicant selects to submit a License Application

3. The System pre-populates the application with information from the user's account (e.g., personal information) as well as information entered by the applicant in the Select a Service use case.
4. The System prompts the Applicant to enter all information required for the license application that has not been pre-populated, including but not limited to:
    a. Personal Information
        i. Name
        ii. Date of Birth
        iii. Address
        iv. Company
        v. ID Number(s) (e.g., Drivers License)
    b. Bond Information
    c. Insurance Information
5. The System shall validate that the application meets all requirements for the selected service.
    a. The System shall enforce various requirements per license type, such as fingerprints, insurance, educational credits, etc.
        i. Depending upon the requirement, a Pass/Fail result may be recorded in the System
        ii. Depending upon the requirement, an Applicant may upload the results of a test, exam, etc. to prove he or she has met the requirements
        iii. Depending upon the requirement, Intake Staff may need to validate the requirement has been met outside of the System
    b. The System shall alert the Applicant to complete any required missing data in mandatory fields and will not process the application until all required information has been provided.
    c. The System shall alert the Applicant to submit any required documentation
        i. If the Applicant does not have digital copies of the required supporting documents the System shall allow the Applicant to select a "Submit in Person" or "Submit via Mail" option.
        ii. The System shall then create a cover page complete with user account information and step by step instructions for use in submitting the documents in person or via mail.
6. The System shall prompt the Applicant to indicate how the Applicant will pay for the application and any other associated fees (see *Use Case: Submit Online Payment*).
7. Once payment has been processed, the Applicant may submit the application.
8. The System shall send a receipt and notification to the Applicant that the application has been received
9. The System updates the status of the application and routes the application to the appropriate department for processing according to pre-defined business rules.

10. Once the application processing is complete (see *Use Case: Process Online Application*), the Applicant will be notified of the status of his or her application.
    a. The Applicant may also view the status of his or her application via the online portal
11. The Applicant may print a copy of their license from the Online Portal
    a. Alternatively, the Applicant may pick up a paper copy of the license from the DSD if business rules prevent the issuance of the license online
12. The System will enroll the license in periodic inspections, renewals, etc. in order for the Applicant to maintain compliance

Alternate Flows:

- The System may prevent an Applicant for submitting an application online if that license type is not eligible for online services.
- The system shall allow the user to save and exit the application process at any point in time and complete the process at a later time.
- The system shall be able to pre-populate the Application with user account information (e.g., name)
- The System shall allow the Applicant to select to submit payment in person (see *Use Case: Record Payment Made in Person*)
- If the System detects a potential compliance issue, the system shall inform the Applicant of additional requirements that need to be submitted/included. For example, if the Applicant has a hold on his or her account, then the System shall not allow the submittal/completion of the application.
- The Applicant visits a DSD office and completes/submits an application at the counter.
- If the Applicant elects to make payment in person or via a DSD office, the application may not be advanced further online until the payment is processed.
- Some licenses may require the completion of an exam; Exam results may be included in the System as part of the application process. (See *Use Case: Schedule an Exam Online, Use Case: Conduct Examination and Record Outcome*).
- Some licenses may require documentation or verification that may only be submitted or conducted in person; Applicant would need to visit DSD and City Intake Staff would upload and attach documentation to record.
- Some licenses may prevent detailed information related to application processing (e.g., background checks) from being stored in the System. In these cases, a simple “pass” or “fail” of the requirement will be recorded in the System.
- Some licenses may require a photo for processing of the license. The Applicant would be directed to come to the DSD office, have their photo taken, and an ID card would then be issued onsite.
- In addition to licensing individuals, the System shall also license vehicles and companies.
- Some Applicants may request to transfer or modify a permit. Examples include the following:

- Transfer a permit from one vehicle to another
  - The System must be able to transfer the payment information related to the initial purchase of the permit to the new vehicle's record.
- Transfer a vehicle from one company to another
- Transfer a permit from one company to another

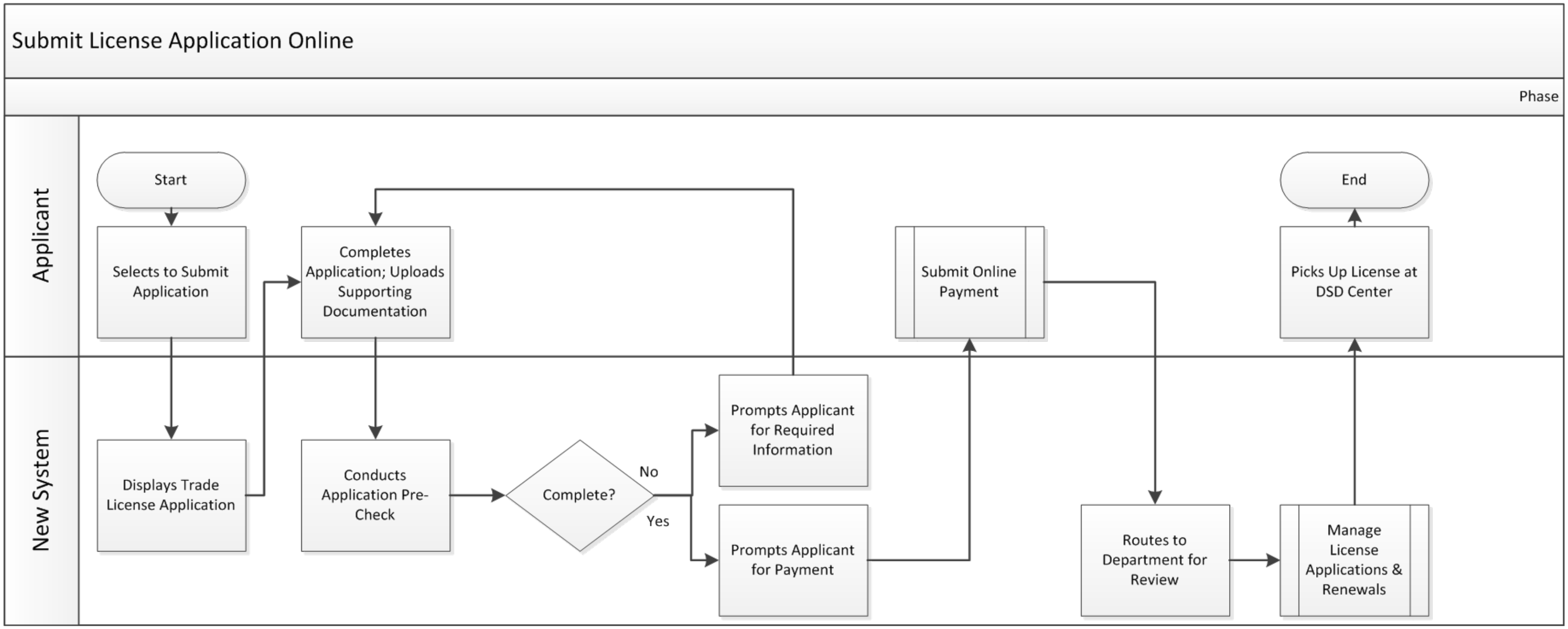
Associations to other Use Cases:

- Use Case: Schedule an Exam Online
- Use Case: Conduct Examination and Record Outcome
- Use Case: Submit Payment Online
- Use Case: Request Additional Information from Applicant

Additional Requirements:

- The System must have the ability to enforce user permissions / roles to protect personal identifying information maintained in the System down to the field level.
- The System must be able to generate and issue an identification card for a license holder.
  - The identification card may include a photo.
- The System must be able to generate and issue a decal that may be placed on a vehicle or other object that contains license information (i.e., VIN#, vehicle make, vehicle model, license plate number, company, company permit number, location).
- The System shall have the capability to capture electronic signature

Figure 10. Submit License Application Online Business Process Flow Diagram



1.4.2 Use Case: Submit License Renewal Online

Actor:

License Holder

Purpose and Objectives:

The purpose of this use case is to assist a License Holder in renewing their license online.

Trigger Events:

- A license holder has received notification (electronic or mail) that their License is due for renewal.

Precondition:

- Existing license is due for renewal
- A renewal notification has been sent to the License Holder.
- A License Holder has a user account OR
- Has received log in credentials via the renewal notice (e.g., access code)
- Eligibility criteria is configured in the System for license types

Post condition:

- A license has been renewed for another term.

Use Case Flow

1. The License Holder access the online portal.
2. The System shall display information relevant to the License Holder, including but not limited to pending license(s) due for renewal.
3. The License Holder selects the license record that is ready for renewal.
4. The License Holder completes the renewal application and uploads any required documentation.
5. The System shall validate that the application meets all requirements for the selected service.
    a. The System shall alert the License Holder to complete any required missing data in mandatory fields and will not process the application until all required information has been provided.
    b. The System shall alert the License Holder to submit any required documentation, such as proof of educational credits or insurance.
        i. If the License Holder does not have digital copies of the required supporting documents the System shall allow the Applicant to select a “Submit in Person” or “Submit via Mail” option.
        ii. The System shall then create a cover page complete with user account information and step by step instructions for use in submitting the documents in person.

6. The System shall provide an option for the License Holder to view and modify any appropriate sections of the application, such as updating related license or certification information from other regulating entities.
7. The System shall prompt the License Holder to indicate how he or she will pay for the application and any other associated fees (see *Use Case: Submit Online Payment*).
8. Once payment has been processed, the License Holder may submit the application.
9. The System updates the license status indicating that the license has been renewed.
   a. The System shall have the ability to queue the license record for review by a department if required prior to updating the license status to renewed.
   b. The System shall have the capability to reset the license duration based on the category of type renewal criteria.
10. The License Holder selects the option to print a renewal receipt.
    a. The system shall provide the ability to review and print a License Renewal Letter or Certificate as business rules designate for each category of License Type.

Associations to other use cases:

- Use Case: Manage License Renewals
- Use Case: Schedule an Exam Online
- Use Case: Conduct Examination and Record Outcome
- Use Case: Request Additional Information from Applicant

Alternative Flow:

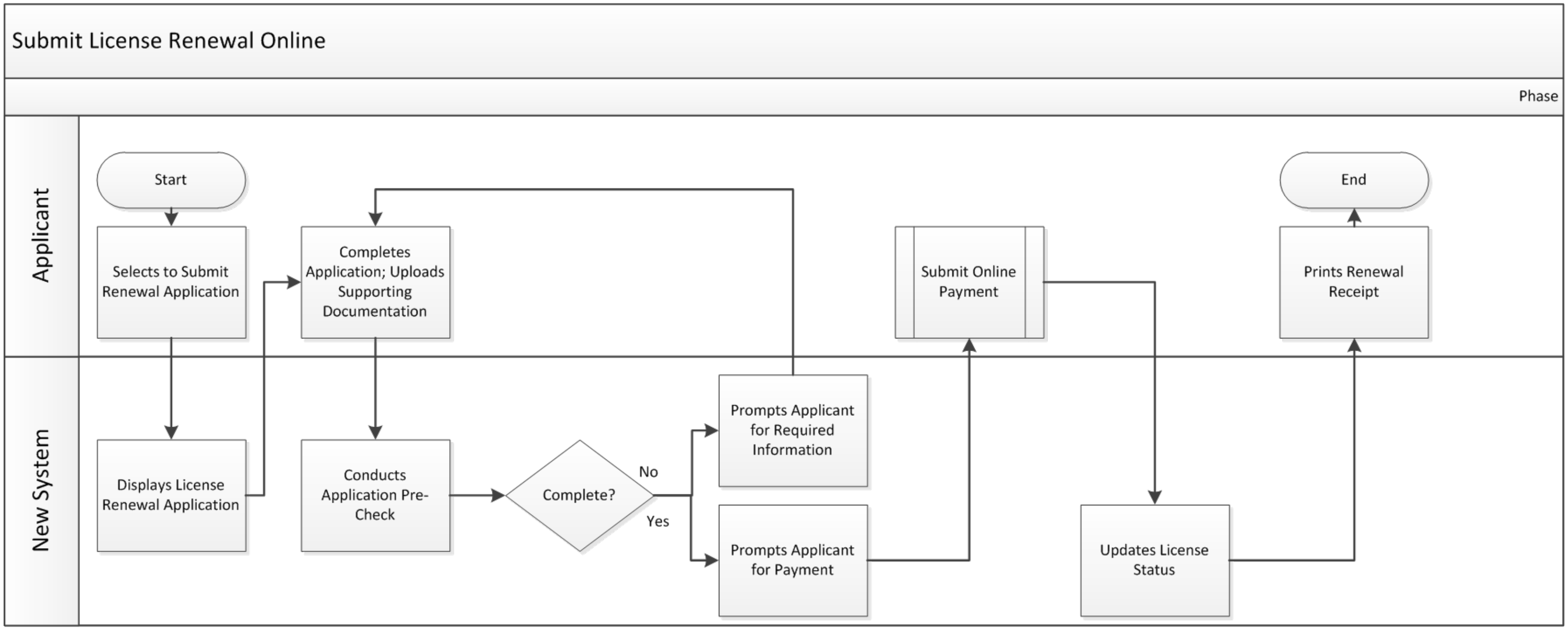
- A License holder does not renew their license and it expires.
- A License renewal requires additional discretionary actions, such as a Supervisor review of continuing experience for the license subject matter.
- The system shall allow the user to save and exit the application process at any point in time and complete the process at a later time.
- The System shall allow the License Holder to select to submit payment in person (see *Use Case: Record Payment Made in Person*)
- If the System detects a potential compliance issue, the system shall inform the License Holder of additional requirements that need to be submitted/included. For example, if the License Holder has a hold on his or her account, then the System shall not allow the submittal/completion of the application.
- If the License Holder elects to make payment in person or via mail, the application may not be advanced further online until the payment is processed.
- Some licenses may require the completion of an exam; Exam results may be included in the System as part of the application process. (See *Use Case: Schedule an Exam Online, Use Case: Conduct Examination and Record Outcome*).
- Some licenses may require documentation or verification that may only be submitted or conducted in person.

- In addition to licensing individuals, the System shall also license vehicles and companies.

Additional Requirements:

- The system shall have the ability to flag, stop, or perform some other action for ongoing development projects when an associated license holder license status defaults to a status that indicates “expired”.
- The System shall have the ability to interface with the Texas State Licensing System to validate the status of the state license.
- The System must have the ability to enforce user permissions / roles to protect personal identifying information maintained in the System down to the field level.
- The System shall have the ability to require various pre-requisites for license renewal according to the renewal period (i.e., Drug test required annually, new fingerprints required every three years).
- The System must be able to generate and issue an identification card for a license holder.
  - The identification card may include a photo.
    - The System must be able to reuse an existing picture for the identification card for renewals.
- The System must be able to generate and issue a decal that may be placed on a vehicle or other object that contains license information (i.e., VIN#, vehicle make, vehicle model, license plate number, company, company permit number, location).
- The System shall have the capability to capture electronic signature

Figure 11. Submit License Renewal Online Business Process Flow Diagram



1.4.3 Use Case: Manage License Renewals

Actor:

Department Intake Staff (or “Intake Staff”)

Purpose and Objectives:

The purpose of this use case is to outline the process of Intake Staff administering license renewal notices.

Trigger Events:

- Existing license is due for renewal

Precondition:

- An active license crosses a date-based threshold to initiate renewal notifications.

Post condition:

- A license has been renewed for another term.

Use Case Flow

1. Intake Staff accesses their account.
2. The System shall display information relevant to the user, including but not limited to all pending license renewals.
3. Intake Staff reviews a renewal batch and selects to send notifications to license holders.
    a. The System shall have the capability to automatically print renewal letters for periodic renewal batches of licenses.
    b. The System shall have the capability to send electronic notifications to the license holder as reminders to renew their license in addition to printed letters.
    c. The System shall have the capability to generate an access code and include it in the renewal notice for the License Holder to log on to the online portal with in lieu of maintaining a username/password.
4. The System updates the License Holder Record with the time/date the letters were generated.
5. Intake Staff collects the printed notification letters and mails them (outside the System).
    a. The System shall have the capability to associate batch notification letters to the license application record for storage in an electronic document management system.

Associations to other use cases:

- Use Case: Submit License Renewal Online

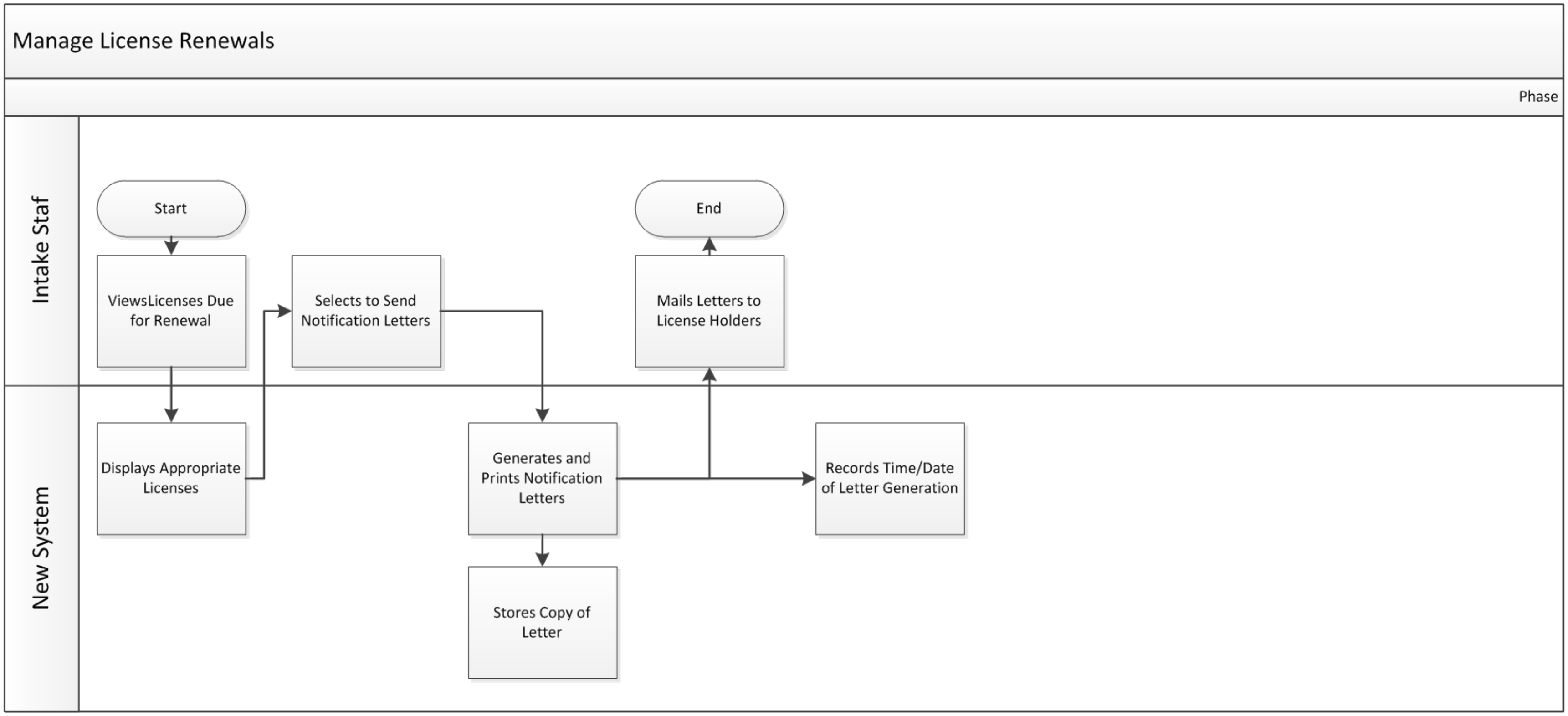
Alternative Flow:

- The System shall have the capability for a license holder to electronically register with the portal to forego mailed renewal letters in favor of electronic renewal notifications that are sent to the license holders contact email address.
- In addition to licensing individuals, the System shall also license vehicles and companies.

Additional Requirements:

- The System shall have the capability to define renewal periods for categories of license types.
- The System shall have the capability to automatically process batches of license renewal notifications.
- The System must have the ability to enforce user permissions / roles to protect personal identifying information maintained in the System down to the field level.
- The System shall have the capability to capture electronic signature.

Figure 12. Manage License Renewals Process Flow Diagram



1.4.4 Use Case: Schedule an Exam Online

Actor:

License Applicant (or "Applicant")

Purpose and Objectives:

This use case describes how the online portal will enable the License Applicant to schedule an exam dates directly from the System based on the available date criteria from the system, if an exam is required for that license type, and the City administers the exam. The System shall provide the ability for the City to define whether the requested exam dates are automatically scheduled or queued for review prior to getting formally scheduled.

Trigger Events:

- The License application requires an exam.

Precondition:

- A License application has been submitted and an exam is required.
- The System calendar is up to date with available exam dates.
- The System has notified an Applicant that an exam is required via the Applicant's preferred method of communication

Post Condition:

- An exam has been scheduled
- The System will allow the Applicant to log in and take the exam

Use Case Flow:

1. The Applicant logs into the online portal after receiving notification.
2. The System shall display information relevant to the user, including but not limited to all pending applications that require action from the Applicant.
3. The Applicant selects a license application that is ready for exam scheduling.
4. The System shall provide an option for the Applicant to view and select available exam dates.
    a. The System shall allow the Applicant to view the history of previous exams.
    b. The System shall provide the ability for City employees (i.e. City Clerks, Engineers, or Inspectors) to preload available exam dates into the systems calendaring functionality (see *Use Case: Manage Exam Calendar* use case).
        i. The System shall provide the capability of integrating with City Employee external calendaring systems, such as Google Calendar and Microsoft Outlook.

   c. The System shall provide the capability to manage the auto-scheduling of exams based on a combination of available exam dates, trade type classifications, exam types, and required durations.

5. Once the Applicant selects the exam timeframe of their preference, the System shall confirm the exam request has been submitted.
   a. The System shall present details of the exam event, such as location, date, time, duration, open/closed book, written or oral, recommended material for prep, recommended material for the exam, etc.
   b. If applicable, the System shall prompt the Applicant to pay fees.
6. The System routes the exam request to the appropriate License Examiner.
7. The License Examiner approves the exam request or schedules an alternate date if necessary.
   a. The License Examiner can view the exam request and license application for more information.
   b. The License Examiner can view upcoming examination schedules, including but not limited to number of scheduled attendees.
8. The System updates the exam request and the exam roster for selected exam date.
9. The System updates the application status to reflect the pending exam.
10. The System notifies the Applicant of exam confirmation.
    a. The System shall allow the Applicant to print pre-defined information about their upcoming exam, including but not limited to:
       i. Directions to the exam location.
       ii. Confirmation of registration for exam
11. The System shall remind the Applicant of upcoming examination date according to user-defined preferences and/or any predefined business rules.

Alternate Flows:

- The System may allow the automatic scheduling and confirmation of the exam without approval of a License Examiner.
- The System shall provide the Applicant the ability to modify the exam request prior to the date of the exam, according to pre-defined business rules.
- The System shall support exams for Continuing Education Classes

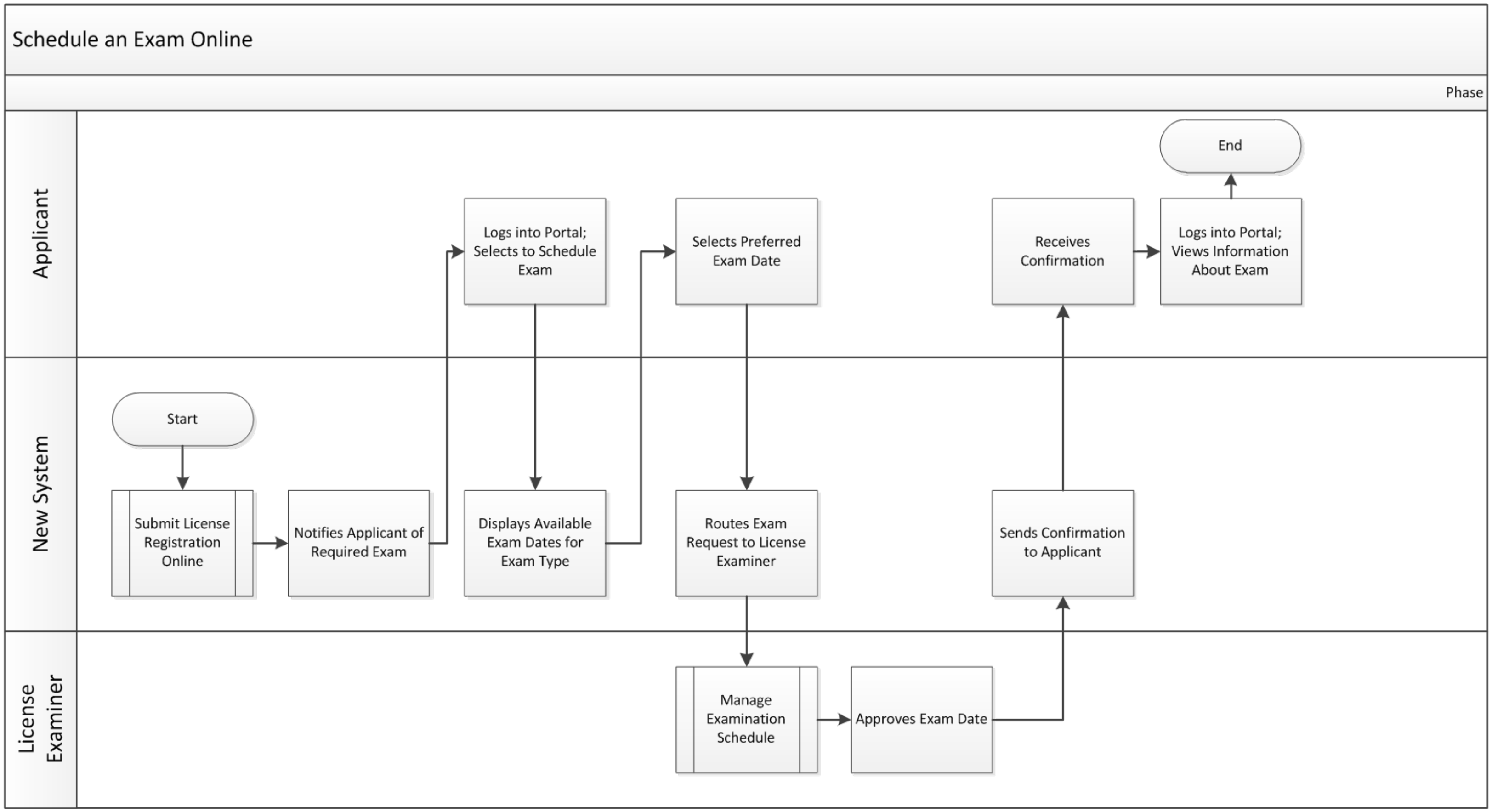
Associations to other Use Cases:

- Use Case: Submit License Registration Online
- Use Case: Submit License Renewal Online
- Use Case: Conduct Examination and Record Outcome
- Use Case: Manage Examination Schedule

Additional Requirements:

- The System shall allow exams to be classified for calendaring purposes, such as defining which exam types require certain durations, required materials, written/verbal exams.
- The System shall allow the automatic enforcement of exam scheduling limitations, such as when an exam has been failed once and can be re-scheduled no less than 30 days later or when an exam failure triggers the closure of a license application.
- The System shall have the capability to capture electronic signature

Figure 13. Schedule an Exam Online Business Process Flow Diagram



1.4.5 Use Case: Manage Examination Schedule

Actor:

License Examiner

Purpose and Objectives:

The purpose of this use case is to outline the process of a License Examiner maintaining an exam calendar in the new System on an ongoing basis. License Applicants and License application processors can utilize this online exam calendar for scheduling required License exams.

Trigger Events:

- A License Examiner needs to add an exam calendar

Precondition:

- The Examiner has a user account in the System.

Post condition:

- A License Examiner has added an exam calendar.

Use Case Flow

1. The Examiner logs into the System and navigates to the Exam Calendar.
2. The System shall provide the capability to progress through a wizard-like series of screens for the Examiner to create a new Exam Calendar for an upcoming period of time.
    a. The System shall provide the capability to define calendar and exam event information that will inform the calendaring process, such as calendar durations, exam types, exam durations, exam materials, exam locations, etc.
    b. The System shall provide the capability to integrate with 3rd party calendar systems, such as Google Calendar and Microsoft Outlook.
    c. The System shall provide the capability to save Exam Calendars that are in-progress and allow the Examiner to return to saved calendars in the future.
    d. The System shall provide the capability of creating non-production system Exam Calendars for review, updates, and approval queues by other registered system users prior to active posting in the system.
    e. The System shall provide the capability to queue exam calendars for review by relevant city personnel prior to posting to the system for exam scheduling.
3. The Examiner will submit the final Exam Calendar to the system to be available for exam scheduling.
    a. The System shall provide the capability to dynamically and automatically maintain available exam dates and scheduling as exams are schedules via the system.

Associations to other use cases:

- Use Case: Submit License Registration Online
- Use Case: Submit License Renewal Online
- Use Case: Conduct Examination and Record Outcome
- Use Case: Schedule an Exam Online

Alternative Flow:

- A License Examiner needs to modify the online exam calendar due to changes in availability after the initial schedule has already been posted.

Additional Requirements:

- The System shall have the capability to capture electronic signature

1.4.6 Use Case: Conduct Examination and Record Outcome

Actor:

License Examiner

Purpose and Objectives:

License Applicants may require an exam. The purpose of this use case is to outline the process of an Examiner conducting an exam in person (via a computer, written, or oral exam format), and for the results to be recorded into the new System.

Trigger Events:

- An exam has been required as part of the application process, AND
- An exam has been scheduled (see *Use Case: Schedule an Exam Online*), AND
- An exam has been completed and requires results being entered into the System

Precondition:

- A License application has been accepted and an exam is required.
- The system calendar is up to date with available exam dates (see *Use Case: Manage Exam Schedule*).
- A License Applicant has successfully scheduled an exam (see *Use Case: Schedule an Exam Online*).
- A License Applicant has successfully completed an exam and the results need to be entered into the system

Post condition:

- An exam result has been captured into the System.

Use Case Flow

1. The exam is conducted and scored outside of the System.
    a. The System shall have the capability to integrate with a Learning Management Solution that conducts exams and records scores electronically.
2. An Examiner logs into their user account.
    a. The System shall have the capability to provide account access to both internal City employees, as well as external City examiners.
3. The System shall display a dashboard with all pending exams.
    a. The System shall allow the Examiner to search for pending exams in an ad-hoc manner
4. The Examiner selects an exam that is ready for exam scoring.
5. The System shall provide a structured template for the Examiner to record the outcome of the examination, such as inputting an exam score, selecting a discretionary general “Pass” or “Fail” status, and inputting comments.

   a. The System shall provide the capability to pre-define scoring parameters that indicated a “Pass” or “Fail” status of exam for certain exam types (e.g. written exams).
   b. The System shall provide the capability to define a discretionary “Pass” or “Fail” assignment to certain exam types (e.g. oral exams).
   c. The System shall support the uploading of a file that contains exam scores to update the System (e.g., Excel spreadsheet).
   d. The System shall allow multiple scores to be entered as part of a batch process (e.g., Select multiple exam participants and enter “pass” result).

6. The System shall progress the License application workflow as necessary based on exam score input by the Examiner.
7. The System will notify the Applicant according to his or her communication settings (e.g., email).
8. The System will update the exam history for the Applicant.

Associations to other use cases:

- Use Case: Submit License Registration Online
- Use Case: Submit License Renewal Online
- Use Case: Manage Examination Schedule
- Use Case: Schedule an Exam Online

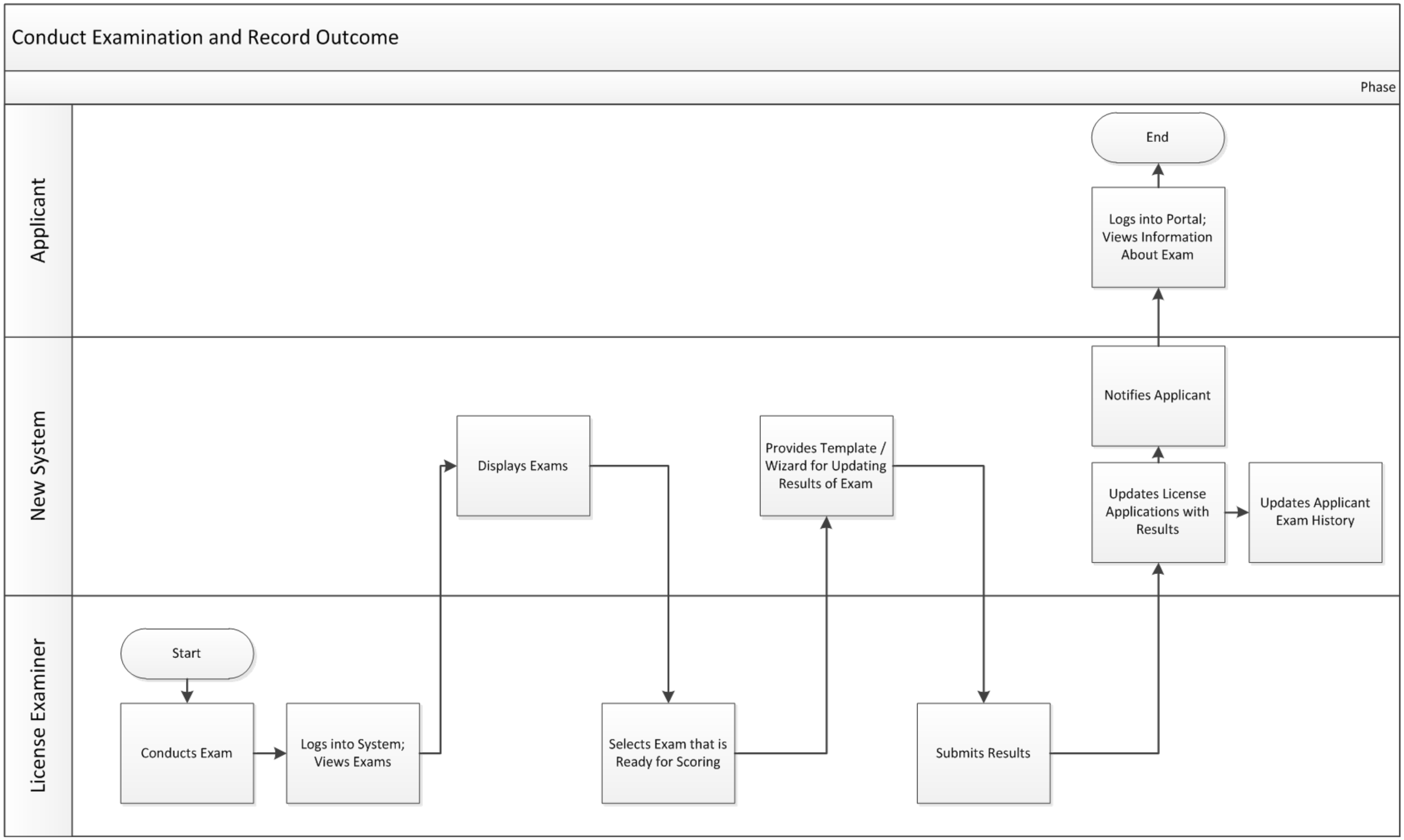
Alternative Flow:

- If an Applicant does not complete an examination with the required passing score, the System may notify the Applicant according to pre-defined business rules. The Applicant may repeat the examination process until he or she meets the requirements for the license.
  - The System will support the enforcement of any waiting periods before the Applicant can re-test according to pre-defined business rules.
  - The System will capture the Applicant’s examination history.

Additional Requirements:

- The System shall provide the ability to automatically generate relevant documents, such as exam result notification letters and certification/registration issuance letters, as required (e.g. generate and print from the exam location for Applicant) or in a batch fashion (e.g. generate, print, and mail monthly letters).
- The System shall be able to integrate with an online Learning Management System.
- The System shall support the batch entering and/or uploading of exam results.
- The System shall have the capability to capture electronic signature

Figure 14. Conduct Examination and Record Outcome Process Flow Diagram



1.5 Electronic Plan Review Use Cases

After collecting as much information as possible the plans submitted by the Applicant are routed for review. This set of Use Cases assists Plan Reviewers/Engineers and Supervisors with facilitating the review process, electronic plan review, communication between City departments, and additional requests from the Applicant.

After application submission, the plans submitted by the Applicant are routed for review. This set of Use Cases outlines the process for Plan Reviewers/Engineers and Supervisors with facilitating the review process.

1.5.1 Use Case: Submit Plans Online

Actor:

Applicant

Purpose and Objectives:

This Use Case outlines the process of an Applicant submitting plans through the online portal as part of the application process. An Applicant may also be required to submit plans online as part of the re-submittal process based on comments/requests from reviewer(s), or due to Applicant's desire to make updates to the project.

Trigger Events:

- The Applicant has completed an application online that requires plans and is in a status eligible for plan submission, OR
- The Applicant has received a notification that additional plans or modifications to previously submitted plans are required.

Precondition:

- The Applicant has created a user account
- The Applicant has created an application that is in process and/or saved (see Use Case: Submit Online Application)

Post condition:

- The Applicant has successfully submitted and attached plans to the application.

Use Case Flow

1. The Applicant accesses the online portal
2. The System displays information relevant to the Applicant, including but not limited to a list of his or her pending applications and their status (e.g., indicating which applications are complete and which require additional information, such as plan submittal).
3. The Applicant selects to submit plans for an application from the list
4. The System guides the Applicant through the plan submittal process
    a. The System shall have the ability to define specific categories of plans to be submitted for particular application types.

   b. The System shall provide a means to download, edit, and print a map that includes parcel lines, building footprint, and available relevant GIS data features from the City's GIS System
   c. The System shall display the plan in the scale and format required by DSD
   d. The System shall allow the Applicant to annotate and mark up plans, using pre-defined shapes/colors and notations based on DSD standards
   e. The System shall allow the Applicant to upload the edited plan to the application record
   f. The System shall provide online instructions and guidelines for plan submissions, including acceptable formats, level of detail, content requirements, sample scope of work, and sample for plan types to be submitted.
   g. The System shall display specific requirements provided by DSD staff for plans or plan modifications requested during the review process.
   h. The System shall link each plan submitted to the specific plan submission requirements in the application (e.g. a Site Plan shall be attached to all application components or permits that require a site plan, etc.)
5. The System shall prompt the Applicant to either "upload the plans online" or allow an alternative option to "submit plans in person".
   a. If the Applicant elects to "submit plans in person" the System shall generate a cover page for the Applicant to bring to the DSD Building for submission.
      i. The System shall also send periodic reminders to the Applicant regarding incomplete application for lack of plans.
      ii. The System shall also send periodic reminders to the Applicant regarding need to resubmit plans to address review comments.
   b. The System shall allow users to either drag-and-drop the plans into the application or allow the user to upload by searching their computer for a file.
   c. The System shall at a minimum accept multiple formats for the submission of plans, including:
      i. .pdf (mandatory)
      ii. CAD files (mandatory)
      iii. .jpg (optional)
      iv. .tiff (mandatory)
      v. Microstation (DGN) (optional)
   d. The System shall enforce any file size limitations as defined by the City
   e. The System shall have a mechanism where the Applicant can track the upload of the file.
   f. The System shall display all uploaded files for the user to review.
   g. The System shall display thumbnails of all submitted plans.
   h. The System shall auto-link the uploaded files to the application
   i. The System shall allow version control of uploaded plans.

6. After the Applicant has uploaded all documents and is satisfied that all of the appropriate files have been uploaded correctly, the System shall allow the Applicant to submit the plans.
7. The System stores the plans with the associated System record (e.g., Application)
    a. The System stores the date and time that the plans were received
    b. The System will prevent further alteration to the original submittals unless part of the defined review process
    c. The System will generate an overall index list (drawing/document list) for all document sets to aide in navigation to specific drawings/documents
    d. The System shall be have the ability to archive plans as well as maintain version control over multiple submissions
    e. The System shall have the ability to purge applications and files for those projects that are abandoned prior to a permit being issued. Examples of business rules the System should be able to support include the following:
        i. A notice shall be sent out if there is no activity by the applicant longer than 180 days from the date of a request for updated information from a Plan Reviewer and the System shall purge the application.
        ii. Files and plans after 365 days of no activity.
8. The System advances the application to the next step in the defined workflow for processing the application.
    a. The plans will be validated by the System and DSD intake staff for completeness and accuracy before being routed to a skilled plan review engineer to continue with the plan review process

Associations to Other Use Cases:

- Use Case: Submit Application Online
- Use Case: Assign Plans for Review

Alternative Flow:

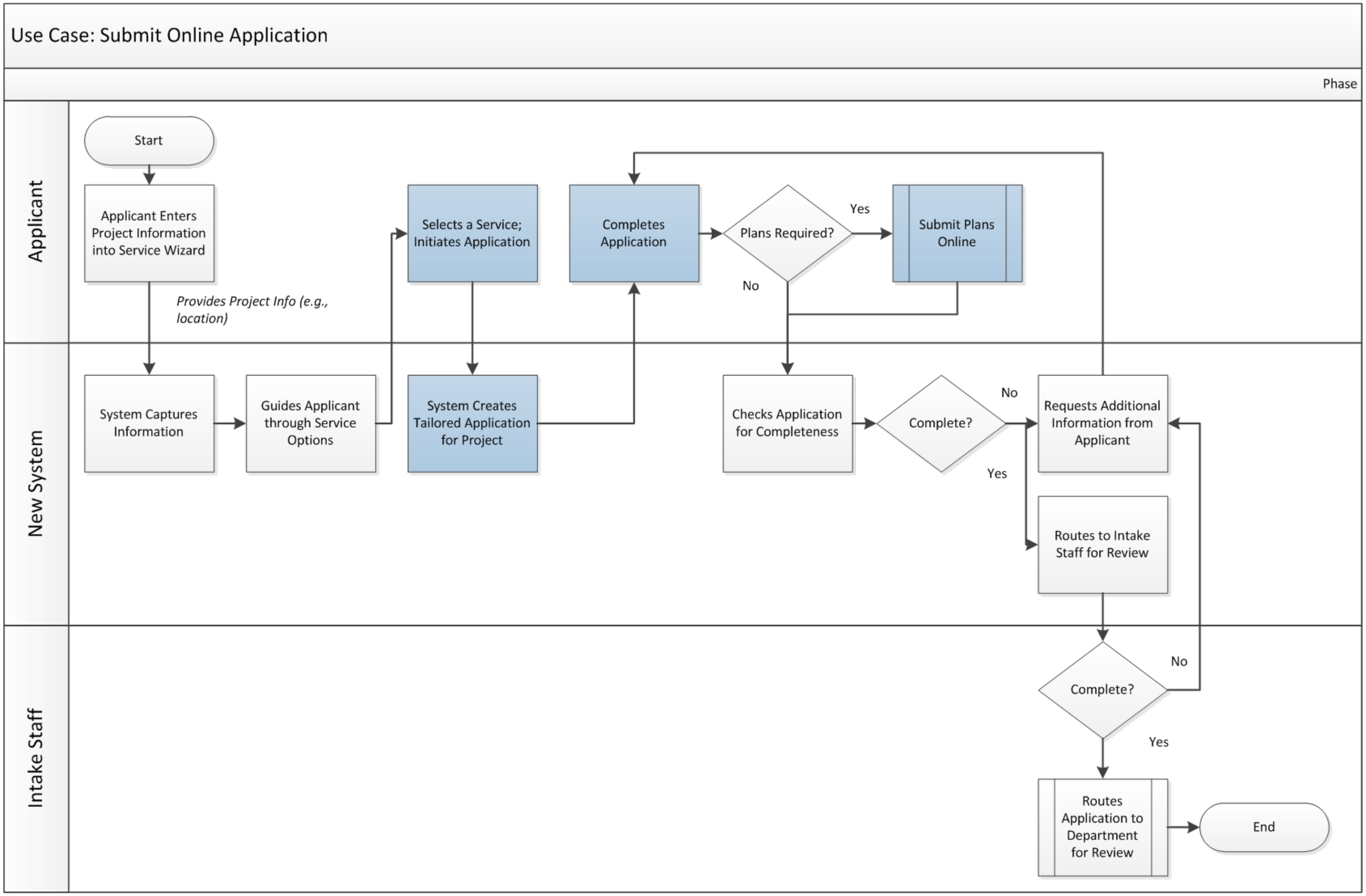
- Applicant visits the DSD Center and submits plans via physical media (e.g., CD, DVD)
- Applicant visits the DSD Center and submits paper plans. DSD Intake Staff will be responsible for scanning the plans into the System as part of Application Processing. Once the plans and associated application are logged, the System will initiate the workflow outlined in this use case.
- If the Applicant never submits the plans required to complete the application, the application will continue to remain in an incomplete status and will not advance for further processing.
- Applicant may start an application online
- Applicant may submit an application in person

- A Supervisory Override may be utilized to advance an application forward for any reason, including missing paperwork, etc.
- Applicant may submit hardcopy applications, paperwork, and plans and none of the documentation are scanned into the System. A permit tracking number is created, all paperwork is reviewed outside of the System, and upon approval a permit is issued.

Additional Requirements:

- The System shall have the ability to capture electronic signature

Figure 15. Submit Plans Online Business Process Flow Diagram (sub-process of overall application process)



1.5.2 Use Case: Assign Plans for Review

Actor:

City Plan Review Supervisor (or "Supervisor")

Purpose and Objectives:

The System will route applications and associated plans to departmental reviewers based on business rules driven workflow automation. Workload assignments will be based on generic business rules such as discipline, location, skills, type of review, etc. While such automated assignment may work in many cases, Supervisors will be monitoring workloads at all times and may make adjustments as necessary to ensure workload is distributed in the most efficient and effective manner.

The purpose of this Use Case is to allow a City Plan Review Supervisor to monitor the progress and status of his or her particular review staff case load and/or to manually make changes workload assignments. This Use Case will grant the Supervisor visibility into any plan reviewer's workload, with the purpose of facilitating the quality and timely review of assigned plans within acceptable performance measures. The Supervisor may also flag/prioritize specific plans for expedited reviews.

This Use Case allows a Supervisor to proactively assign, monitor, and manage plan review workload across the plan review workforce to be able to identify potential scheduling or review challenges before they occur, as well as mitigate any schedule or review issues as they arise.

Trigger Events:

- The Applicant has completed an application for a service that requires a plan review
- The System has routed the plan review request to the Supervisor's queue for assignment or escalation
  - Plans may be routed directly to the Plan Reviewer's queue, bypassing this process if business rules are set up in the System to facilitate direct assignment to a Plan Reviewer.
  - Plan reviews may also be manually created by a Plan Reviewer, bypassing this process

Precondition:

- The Supervisor has a user profile in the System.
- The System has pre-defined rules and configuration implemented to govern plan assignment and routing.
- The System has pre-defined service levels and built-in triggers for performance monitoring to feed the Supervisor dashboard.

Post condition:

- A Supervisor has monitored and effectively adjusted workload as necessary.
- Plans have been assigned to the appropriate Plan Reviewer

Use Case Flow

1. The Supervisor logs into the System

2. The System displays information relevant to the Supervisor, including but not limited to information about the workload of their assigned workforce
    a. The System shall display all unassigned reviews
    b. The System shall display the workload for all his/her assigned resources, including availability and backlog for each reviewer.
    c. The System shall provide visual cues for potential issues with workload assignment (e.g. aging of workload, throughput issues, etc.
3. The Supervisor reviews the case loads and shall have the capability to make adjustments, such as re-assigning cases (or entire case loads) from one plan reviewer to another, balancing new assignments among reviewers, etc.
    a. The System shall have the capability to provide information on each individual plan reviewer, such as location, specific skill sets, planned vacations, case load, etc.
4. The Supervisor may also review a list of at-risk plan reviews and select particular reviews that are close to not meeting, or have not met, performance metrics.
    a. The System shall provide the functionality to display the plan review information in a manner that compares current performance metrics of the plan review against typically acceptable performance of the plan review (Example: Plan review type A typically takes 3 days and is now beyond 5 days and still pending completion)
    b. The Supervisor shall have the capability to drill-down into specific sections of the application and plan review as necessary to research current status.
5. The System shall provide a variety of means for the Supervisor to resolve the issues, including but not limited to the following:
    a. Re-assign plan reviews or workloads as a whole
    b. Send a communication to the Applicant
    c. Record an internal note on the application
    d. Request additional information from Applicant (See *"Request Additional Information From Applicant"* Use Case)
    e. Update the application workflow or status to indicate escalation and action by other parties
6. The Supervisor assigns a plan review to an eligible Plan Reviewer
7. Once the Supervisor has completed all actions related to monitoring and managing the workload of his assigned workforce, the System shall save all changes and update the queues for each resource.

Associations to other Use Cases:

- Use Case: Submit Application Online
- Use Case: Submit Plans Online
- Use Case: Request Additional Information from Applicant

Alternative Flow:

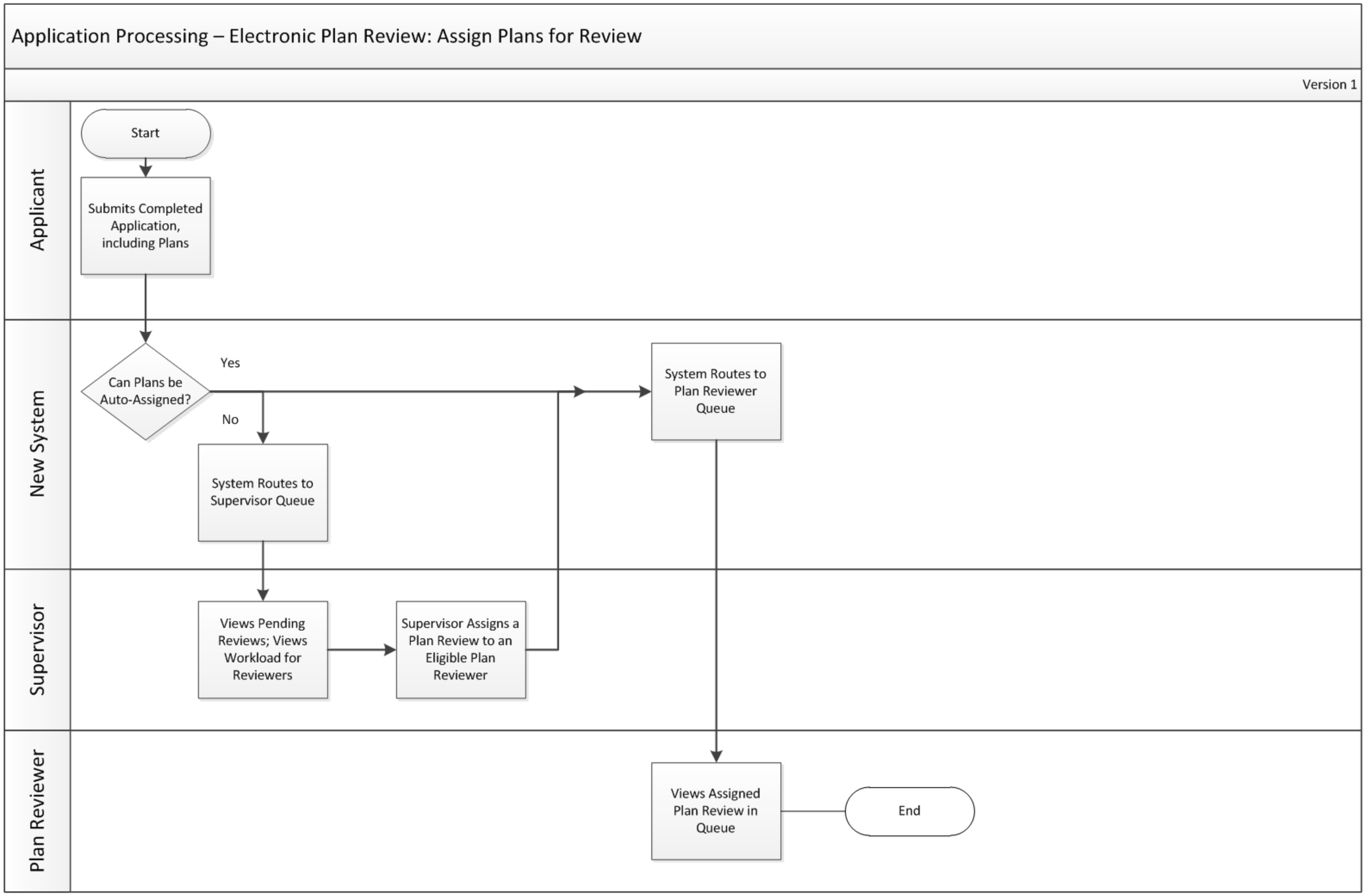
- A plan review is automatically assigned to a Plan Reviewer according to pre-defined business rules
- A plan review has been created by a Plan Reviewer and will be conducted individually or be assigned by the Plan Reviewer to another Plan Reviewer directly
- An unexpected absence by a plan reviewer necessitates that the Supervisor must re-assign pending/in-process plan reviews to the workload of other plan reviewers
- A source external to the System, such as a phone call from the Applicant, prompts the Supervisor to review the workforce workload for a particular issue.
- A plan review has exceeded acceptable performance limits and triggers escalation for issue resolution.
  - A predefined service level overrun triggers an automatic notification to the Supervisor, or
  - A source external to the system notifies the Supervisor that a particular review has an issue that needs the attention of the service manager
- The System has incorrectly auto-assigned a plan review and the Supervisor has been requested to reassign it.
- Plan Reviewers (in addition to Supervisors) may manually route a set of plans to another department (e.g., Applicant fails to identify a change in land use that would require review by the Planning Department; Plan Reviewer may add the department to the required review list).
- Plans may need to be reviewed by external agencies (see *Use Case: Perform Technical Review of Land Development Application*)

Additional Requirements:

- The System shall provide the capability of automatic routing and scheduling of plan reviews based on the type of plan, the weighted level of plan types and the availability of plan reviewers' schedules.
- The System shall allow auto-routing of plans to a specific department, with further routing to a specific Plan Reviewer performed by the Supervisor for that department
- The System shall provide the functionality to define specific performance parameters for each plan review in the service provided by the City.
- The System shall provide the capability to categorize plan review skill-sets for employees (i.e. Certified Planner, Electrical Plan Reviewer, Fire Inspector)
- The System shall provide the capability to assign a predefined weight score to plan review types based on the level of complexity and/or density and/or project type and/or multiple combinations of the above.
- The System shall provide City Employees the capability to override or update the automatic weights assigned by the system to plan reviews based on their review for completeness/compliance.
- The System shall provide the capability to maintain employee calendars of availability (i.e. plan reviewers and Inspectors) and scheduling of events.

- The System shall support a First In First Out (FIFO) based approach for plan review assignments
- The System shall provide the functionality for a Supervisor dashboard to present performance metrics in a meaningful manner, such as prioritization and aging metrics
- The System shall provide a smart calendar to forecast dates for timelines and assist the Supervisor in assigning workloads accordingly.
- The System shall be able to provide a graphical interface to highlight at risk reviews (i.e. red for high risk, yellow approaching risk, and green for OK)
- The System shall have the capability to generate reports on application aging, at risk applications, and departmental efficiency
- The System shall support the ability to integrate with a mail system (e.g., Outlook), including calendar
- The System shall have the ability to capture electronic signature

Figure 16. Assign Plans for Review Process Flow Diagram



1.5.3 Use Case: Review Plans for Compliance and Record Outcome

Actor:

Plan Reviewer (Primary Reviewer)

Purpose and Objectives:

The purpose of this Use Case is to validate that the plans submitted during the application intake process are relevant and in-line with the service or permit applied for. This level of review is performed by a specifically-skilled employee, such as an Engineer, rather than a clerk-level employee.

This Use Case describes the process of a Plan Reviewer reviewing plans that have been submitted through the online portal (or intake counter) for compliance with all applicable requirements that were identified during the intake process. During the review, the Plan Reviewer will mark up the plans, record conditions and clearances and – if necessary – request corrections from the Applicant.

This Use Case may be invoked by one Plan Reviewer or multiple Plan Reviewers in a serial or parallel fashion depending upon the predefined workflow, the level of complexity of the desired service and/or available business logic for cross-checking.

Trigger Events:

- A Supervisor has assigned plans to a Plan Reviewer for review OR
- The System has auto-assigned plans directly to the Plan Reviewer for review

Precondition:

- The plans have been deemed complete as part of the application intake process
- The plans have been routed to the appropriate department(s') plan reviewer(s) as part of the plan assignment process

Post Condition:

- The plans have been reviewed for compliance and have either been approved, OR
- The Applicant has been asked to provide additional information or modifications to the plans

Use Case Flow:

1. The Plan Reviewer logs into the system
2. The System displays information relevant to the Plan Reviewer, including but not limited to a list of plans to be checked.
    a. The System shall allow the sorting and filtering of plans, including but not limited to:
        i. Chronologically
        ii. Ad-hoc
        iii. Grouping plans by plan type or project.
3. The Plan Reviewer selects an application from the queue

4. The System shall display the information necessary to perform the plan review including but not limited to:
    a. Access to an electronic version of the plans
        i. The System shall provide document and version history of all plans for that record.
    b. The System shall have the capability to bring up searchable electronic reference materials for the Plan Reviewer to review (i.e. code handbooks, guidelines based on location of the property).
    c. All clearances, conditions (Variances, Administrative Exceptions, Non-Conforming Use, Code Modifications, etc.), and any additional information associated with the application.
        i. Any location-based conditions pulled through integration with the GIS Central Data Repository, such as zoning district, floodplain reviews required, and/or overlay districts
    d. A checklist for the internal team to review and follow
5. The Plan Reviewer then begins the process of reviewing the plans.
    a. The System shall display who the responsible party for the review is from all involved departments as well as the status associated with those reviews.
    b. The System shall allow the Plan Reviewer to view alternate layers of the plans checked and marked by other Plan Reviewers from all involved departments.
    c. The System shall allow the Plan Reviewer to view previous versions of the plan, previously requested corrections and other historic information.
    d. The System shall display a history of plans related to this project. (e.g. past version, modifications)
    e. The System shall allow the Plan Reviewer to view project information, such as proposed use/project and that proposed lots, blocks, and subdivisions comply with lot regulations, design regulations, and design standards for the zoning district.
    f. The System shall allow the Plan Reviewer to view “parent” land development applications such as MDP’s, PUD’s, etc. to ensure project validity is maintained (see *Use Case: Monitor Project Validity*)
    g. The System shall allow the Plan Reviewer to view site plans and associated requirements, such as no construction over easements, verify setbacks and parking requirements, impervious cover, sidewalk and curb, etc.
    h. The System shall allow for the reviewer to superimpose two drawings to view the differences
    i. The System shall allow for one reviewer, at any time during the review process, to “hold” the plan review. This is to allow one plan reviewer to alert other departments that there are significant problems with the plans that will affect all aspects of the plans/project.
    j. The System shall provide various tools to assist with reviewing the plans, including but not limited to the following:

            i. Measuring tools
            ii. Calculator
            iii. Scaling
            iv. Zoom capability
            v. Side by side viewing of different plans and/or sheets/details

6. The System shall allow the Plan Reviewer to mark plans and/or issue corrections.
    a. The System shall provide an electronic check list to assure all clearances and conditions have been captured.
    b. The System shall provide a template for the Plan Reviewer to issue any corrections or provide feedback.
        i. The template shall include any pre-defined language for a comment type
        ii. The template shall include any standard DSD language
    c. The Plan Reviewer shall be able to highlight/indicate on the plans areas that need to be modified as well as be able to fill out a feedback section in a structured format, providing clear instructions to the Applicant what modification is required and/or what additional information needs to be submitted.
        i. The System shall maintain a history of all markups and markup layers
            1. Plan Reviewer name and department
            2. Date and time stamps
    d. The system shall allow the Plan Reviewer to provide specific code numbers and sections that may be in violation and include them in the feedback.
7. The Plan Reviewer classifies the document (using drop-down menu items or similar) and/or determines required actions.
    a. If plans are compliant (conditions and clearances have been validated and cleared), the Plan Reviewer will digitally approve the plans. Once all plans associated with an application have been reviewed, the System shall update the application.
        i. Approved plans will stamped electronically with an “approval” stamp
            1. The System will allow customizable stamps for each business unit
            2. The System will support various methods to demonstrate that the plans are final and official, such as a watermark
            3. The System will allow any conditions to be included in the approval language
            4. The System will allow free text comment boxes to be applied on the plans
            5. The System will allow only some sheets to be marked “approved” while others may be marked “not reviewed for code compliance” or similar language.
        ii. Approved plans will be saved in a file format that do not allow further modifications (e.g., PDF format)

iii. Approved plans and the review report will be available for download by the Applicant (pending any outstanding fees or other application issues)

iv. Previous plan files that are out of date/older versions of plans already reviewed and commented on shall be marked with some language signifying plans/sheets are "not approved" or similar language.

b. If plans are not compliant, upon completion of the template, the System shall send a notification to the Applicant with all of the comments on the plan and steps required to complete and re-submit the application.

i. The System shall consolidate all comments from multiple reviewers into a single report

ii. The System shall allow the Plan Reviewer to upload any supporting documentation to the comments page (pictures, documents, code, etc.)

iii. The System shall allow the Plan Reviewer to apply a "hold" to the project

1. The System shall support a variety of hold types, with different levels of severity that affect what can and cannot be done going forward until the issue is resolved

2. Plan Check Supervisors shall be able to override "holds" placed in the System.

c. The System shall save a current copy of the plans along with any notes and requested modifications made by the Plan Check Supervisor, including time stamp and author of the request.

8. The System updates the application status
9. The System notifies the Applicant of the application status.
10. The System will allow the Applicant access to plan review information via the online portal according to business rules defined by the business unit (e.g., access to comments)

Alternate Flows:

- If the requested corrections force the Applicant to re-engineer the plans, the application reenters the process at the appropriate step as dictated by the Plan Reviewer for the affected process, which may result in a revision of the plans and revalidation and approvals/signatures. The System would preserve this history of reviews.
- Approval may result in the issuance of approval documentation. See *Use Case: Manage Final Application Approval* for details.
- The System shall have the ability to issue partial approvals (e.g., by sheet) and for partial approvals to allow some workflow to continue (e.g., issuance of foundation permit)
- An Applicant may request to review the plans in person with City Staff. Customers may request to have a preliminary plan review meeting to discuss preliminary design and/or construction issues to prepare for plan review. As a customer service initiative, Plan Reviews by Appointment are also available for certain types of projects to allow for an expedited plan review service. There are also "over the counter" with no/limited reviews

for certain types of construction. The intake staff creates the application and performs all the reviews (if needed) and issues a permit.

- ❑ The System will allow meetings to be requested via the online portal or to be created manually by staff.
- ❑ The System will allow Plan Reviewers to capture comments (both internal and external) related to the Plan Review meeting.
- ❑ The System will allow Plan Reviewers to access and markup plans during the meetings.

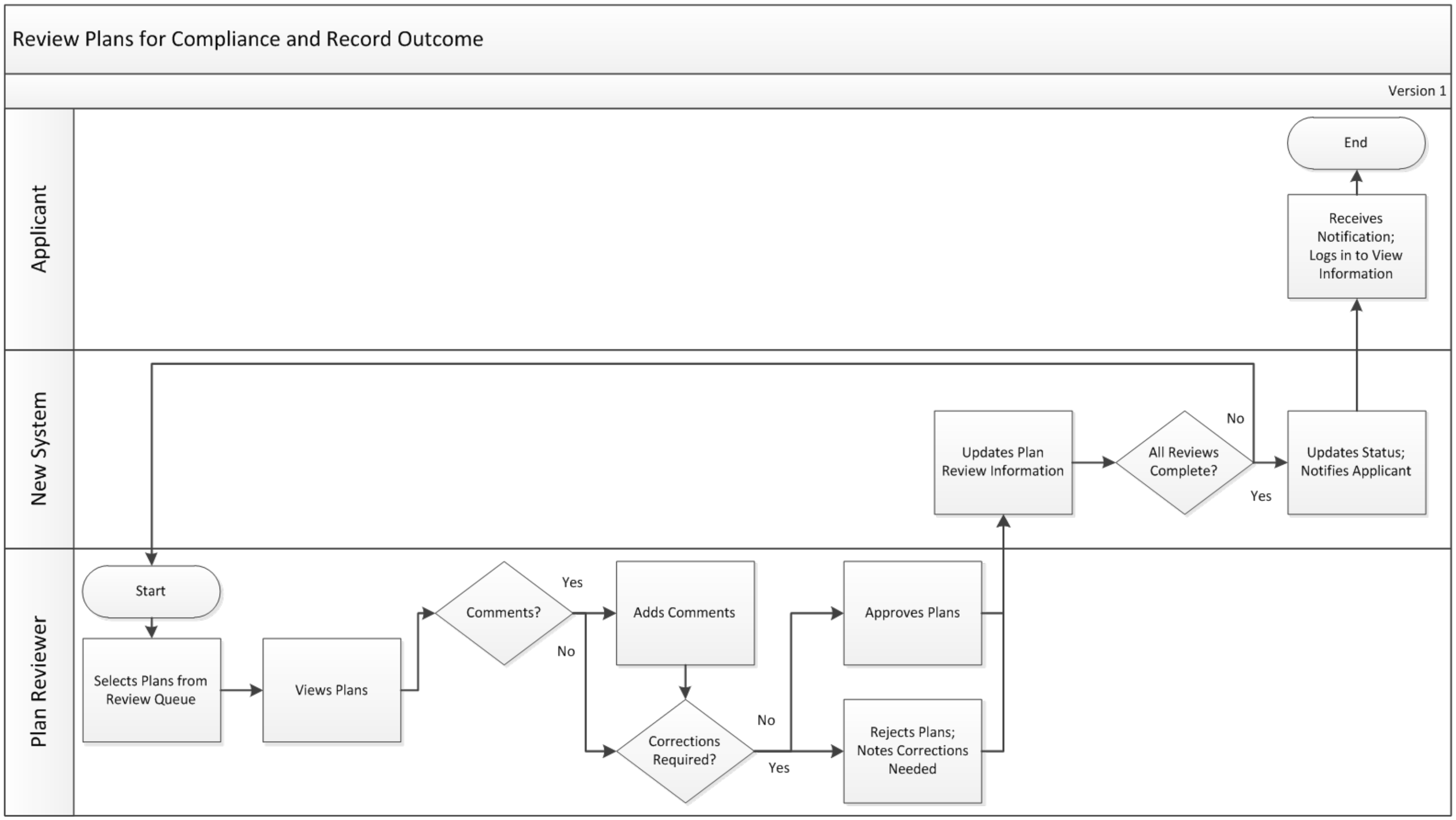
Associations to other Use Cases:

- Use Case: Submit Plans Online
- Use Case: Assign Plans for Review
- Use Case: Manage Final Application Approval
- Use Case: Review Application Status Online

Additional Requirements:

- The System shall allow for customizable and automatic notifications to all stakeholders involved according to various triggers (e.g., status change, assignment/reassignment, etc.)
- The System shall support batch approvals, denials, and or conditions for multiple projects / locations, including but not limited to locations like neighborhoods or apartment buildings.
- When viewing plans, the System should be able to superimpose plans over GIS system so that floodplain and contour data and aerial photos can be viewed with plans.
- The System shall support use of "Master Plans". Plans for a building by itself may be submitted as a "future project for one or more actual sites" and approved for code compliance with no permit issued. Later proposals to place that particular building on a real site by the applicant results in an application with reference to that Master Plan", intake of the application with all plans minus the building plans, some limited reviews related to the site itself, and issuance of a permit. The applicant shall receive approved plans for site work as well as previous approved building Master Plans.
- The System shall have the ability to capture electronic signature
- The System shall have the ability for an Applicant to view a plan remotely and simultaneously within the plans analysis review period conducted by the City, but will prevent submission of modified plans during this time.

Figure 17. Review Plans for Compliance and Record Outcome Process Flow Diagram



1.6 Inspections Use Cases

Once a permit has been issued by the City it requires a certain amount of oversight that is provided by the inspection process. This set of Use Cases outlines the process of creating, scheduling, assigning, managing and conducting inspections.

1.6.1 Use Case: Submit Inspection Request Online

Actor:

Applicant

Purpose and Objectives:

Currently the City provides multiple mediums for Applicants, citizens, and City personnel to request inspections, such as via an online web page or by calling City customer service representatives. Inspections can be requested for applications either during pre-permit or permitted phases, as well as for potential violations that require investigation.

The purpose of this use case is to outline the process for an Applicant to request an inspection via the online portal in the new System.

Trigger Events:

- An Applicant is ready to request an inspection OR
- An Applicant/Permit Holder has been notified that an inspection is required

Precondition:

- An Applicant's project has sufficiently progressed to require an inspection AND/OR
- A permit has been issued.

Post Condition:

- An inspection has been requested successfully
- The System has either automatically assigned the inspection to an Inspector, OR added the request to a queue of inspections for a Supervisor to assign.

Use Case Flow:

1. The Applicant accesses the online portal.
2. The System displays information relevant to the Applicant, including but not limited to pending applications.
3. The Applicant selects an application that has progressed beyond initial permit issuance and/or a project for which inspections can be requested.
4. The System shall provide an option for the Applicant to view inspection activity and history for the selected Application / Project.
5. The System shall provide an option to request/schedule a particular type of inspection.
    a. The System shall provide the capability to show only the inspections that are available for the Applicant to choose from according to pre-defined business rules.

   b. The System shall allow the Applicant to request a preferred (not guaranteed) date/time of inspection (e.g., four hour window)
      i. The System shall provide the capability to define which inspections can be scheduled for a specific date/time or only when certain criteria is met by an Applicant based on pre-defined business rules
      ii. The System may allow the Applicant to indicate a specific location for the inspection to take place that is different from what appears on the permit according to pre-defined business rules (e.g., for sign inspections)
      iii. The System will determine eligibility for requesting an inspection, and prevent an Applicant from scheduling an inspection according to pre-defined business rules (i.e. inspection limit for particular day as been reached, outstanding fees on account).
   c. The System shall provide information about the inspection and restrictions connected to that inspection (i.e. inability to start a project prior to the inspection).
6. The System shall prompt the Applicant to provide detailed inspection information in order to submit the inspection request.
   a. The inspection information shall be customizable according to inspection type.
   b. The inspection request detail section shall provide a structured way for the Applicant to input data-specific input elements (e.g. drop-downs, yes/no) and text-based comments (e.g. “key is in 3rd flower pot from the left”), as well as required data objects.
   c. The Applicant may upload supporting documentation related to the inspection request.
7. The Applicant updates the inspection request details, submits the inspection request and the System shall validate the request.
   a. If the request is incomplete (i.e. an incompatible data entry like text into a date field or left a required data field blank) the System shall prompt the Applicant to correct the offending data object.
   b. If the request is valid then the System shall accept the request and update the application record accordingly.
      i. The System shall have the capability to automatically progress workflow and events when data is input.
      ii. The System shall have the capability to send or post electronic notifications (email, SMS, etc.) when inspection requests are submitted.
      iii. The System shall have the capability to cancel/reschedule the inspection request at any point in the process.
      iv. If required, the System may require the Applicant to submit payment prior to the Inspection being scheduled (see *Use Case: Submit Online Payment)*.

Alternate Flows:

- The System shall have the capability to automatically schedule/request the next logical inspection from a predefined sequence of inspections based on an update to the system (e.g. Application Status update to “Permit Issued” automatically requests/schedules a Rough-In inspection)
- The System shall allow City Inspectors or other City personnel to manually add inspections in the System according to pre-defined business rules and user role permissions.
- The System allows an Applicant to request an inspection via Phone or email that is manually input into the System by staff.
- During the application process there may be pre-inspections that may be required.
- If an Applicant or project is not eligible for an inspection according to pre-defined business rules, the System will notify the Applicant of the reason the inspection cannot be scheduled and prevent the inspection from being scheduled in the system until the issue is resolved.
- The System will support “courtesy inspections” which take place early in the land development process, and allows developers to start work at their own risk without Planning Commission approval of the plat; Applicant will be prompted to fill out a form where they acknowledge the risk.
  - Precondition is approval by required agencies (at least 3)
  - Triggers downstream workflow activities, such as a Performance Agreement (see *Use Case: Manage Performance Agreement*)

Associations to other Use Cases:

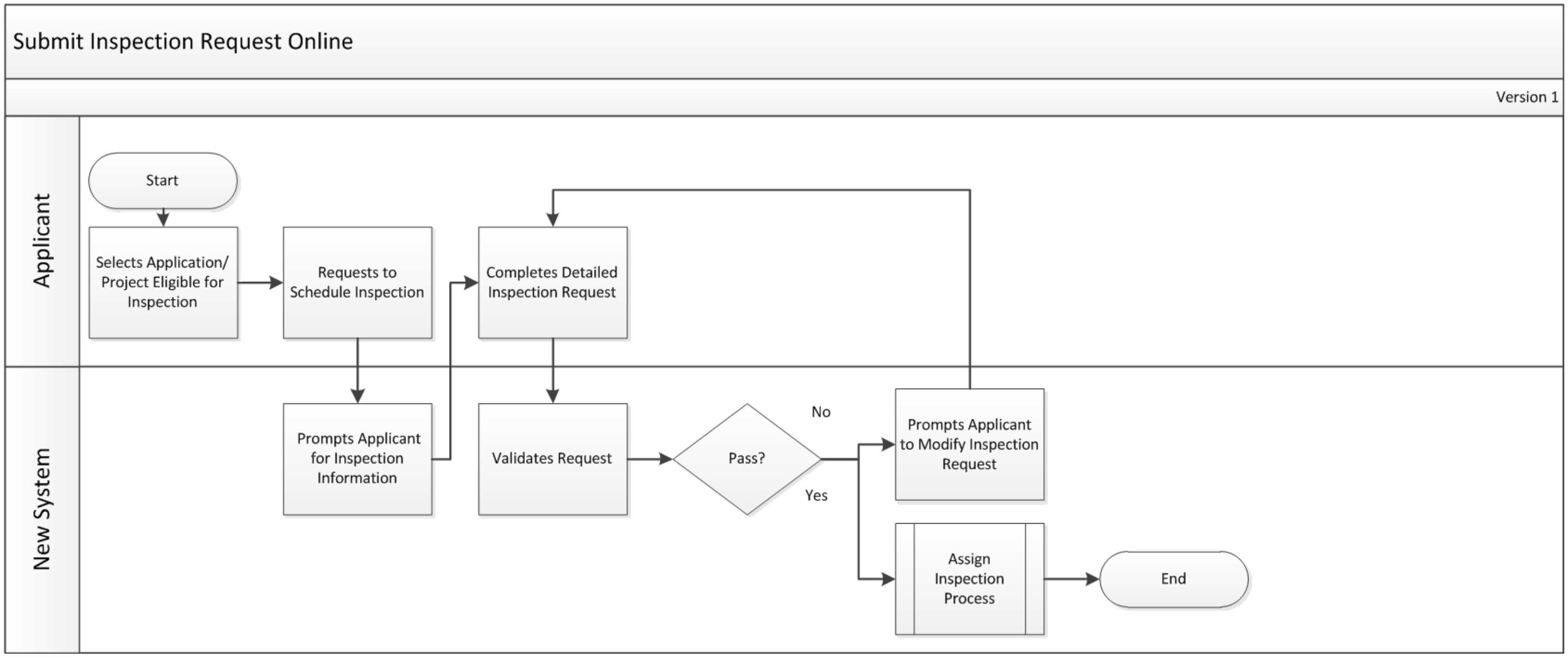
- Use Case: Submit Application Online
- Use Case: Create Inspection
- Use Case: Assign and Manage Inspections

Additional Requirements:

- The System shall provide the capability to integrate with the City’s email system.
- The System shall be accessible from mobile devices and allow City Inspectors the ability to request/schedule inspections from the mobile systems, according to pre-defined business rules and user permissions.
- The System shall provide the capability to present an inspection detail page for the application where the Applicant can view the history and status of inspections, as well as select from a list of available inspections for requesting/scheduling capability.
- The System shall provide the capability to show only the inspections that are available for the Applicant to choose from.
- The System shall provide an online help forum (chat, email, and phone).
- The System shall have the capability to automatically progress system workflow and events when data is input, such as a “No-Show” inspection status result would add an “Extra Trip Fee” being automatically added to the application

- The system shall have the capability to post and send electronic notifications (SMS, email, etc.) when inspection requests are submitted.
- The System shall have the capability to allow the Applicant to cancel or reschedule the inspection request according to pre-defined business rules.
- System shall have the capability to distinguish particular stages in the workflow when inspections can be requested and inspections cannot be requested (e.g. “no scheduling when the workflow is updated to ‘Stop Work Order’ status”).The System shall have the capability to implement inspection scheduling rules (e.g., limit number of inspection types that can occur on a particular day)
- The System shall have the capability to capture electronic signature

Figure 18. Submit Inspection Request Online Business Process Flow Diagram



1.6.2 Use Case: Create Inspection

Actor:

City Personnel (e.g., Supervisor, Inspector, Plan Reviewer)

Purpose and Objectives:

This Use Case allows City personnel, often a Supervisor or Inspector, to manually create an inspection in the system. There are various inspection processes in place to monitor compliance, which are triggered in various scenarios:

- **Proactive / Ad-Hoc Inspections** – These inspections are unannounced to property owners and are unscheduled. Inspectors are typically out in the field and notice a situation that warrants an inspection (e.g., unpermitted construction).
- **Proactive Announced Inspections** – These generally occur in commercial buildings as part of the ongoing verification of valid Certificate of Occupancy compliance; Can be initiated by a permit, plan examiner, or inspector.
- **Periodic Inspections** – Some permits require annual inspections after initial issuance to ensure ongoing compliance.
- **Reactive Inspections** – Some inspections are triggered by a complaint received by the public
- **Requested Inspections** – Inspection is requested by a customer (see Use Case: Request Inspection)
- **Re-inspection** – Inspection is conducted due to the failure or conditional approval of a previous inspection, or as part of an effort to assist a customer towards compliance.

Once an inspection is created in the System, the System will route inspection requests to departmental Supervisors or an Inspector based on business rules driven workflow automation. If routed to a Supervisor, the Supervisor will be responsible for making workload assignments to their individual inspectors and the System may enforce pre-defined business rules such as such as location, skills, type of review, etc. If business rules permit direct assignment to the Inspector, the Inspector will be able to view the inspection on his or her work queue.

Alternatively, the System may create an inspection automatically according to pre-defined business rules driven workflow.

Trigger Events:

- City personnel (e.g., inspector, plan examiner) becomes aware of a project that requires an inspection

Precondition:

- The actor has a user profile in the System that has permissions to create inspections.
- The project is in a status that is eligible for an inspection

Post condition:

- An inspection is created in the System and routed to a Supervisor or Inspector's work queue

Use Case Flow

1. The Inspector logs into the System
2. The System displays information relevant to the Inspector, including but not limited to information about his or her active inspections.
3. The Inspector shall identify the project requiring an inspection.
4. The Inspector shall elect to create an Inspection for that project.
5. The System will prompt the Inspector to enter information about the inspection.
6. The System shall provide an option to request/schedule a particular type of inspection.
    a. The System shall provide the capability to show only the inspections that are available for the Applicant to choose from according to pre-defined business rules.
7. The System shall allow the Inspector to identify the date/time of inspection (e.g., four hour window)
    a. The System shall provide the capability to define which inspections can be scheduled for a specific date/time or only when certain criteria is met by an Applicant based on pre-defined business rules
    b. The System may allow the Inspector to indicate a specific location for the inspection to take place that is different from what appears on the permit according to pre-defined business rules (e.g., for sign inspections)
    c. The System will determine eligibility for requesting an inspection, and prevent an Inspector from scheduling an inspection according to pre-defined business rules (i.e. inspection limit for particular day as been reached, outstanding fees on account).
        i. The System will allow for supervisory overrides
        ii. The System shall provide information about the inspection and restrictions connected to that inspection (i.e. inability to start a project prior to the inspection).
8. The System shall prompt the Inspector to provide detailed inspection information in order to submit the inspection request.
    a. The inspection information shall be customizable according to inspection type.
    b. The inspection request detail section shall provide a structured way for the Inspector to input data-specific input elements (e.g. drop-downs, yes/no) and text-based comments (e.g. “key is in 3rd flower pot from the left”), as well as required data objects.
    c. The Inspector may upload supporting documentation related to the inspection request.
9. The Inspector updates the inspection request details, submits the inspection request and the System shall validate the request.
    a. If the request is incomplete (i.e. an incompatible data entry like text into a date field or left a required data field blank) the System shall prompt the Applicant to correct the offending data object.
    b. If the request is valid then the System shall accept the request and update the application record accordingly.

i. The System shall have the capability to automatically progress workflow and events when data is input.

ii. The System shall have the capability to send or post electronic notifications (email, SMS, etc.) when inspection requests are submitted.

iii. The System shall have the capability to cancel/reschedule the inspection request at any point in the process.

iv. If required, the System may require the Applicant to submit payment prior to the Inspection being scheduled (see *Use Case: Submit Online Payment)*.

10. The System creates a new inspection and routes to the appropriate work queue according to pre-defined business rules

Associations to other Use Cases:

- Use Case: Submit Inspection Request Online
- Use Case: Assign and Manage Inspections

Alternative Flow:

- Inspections may be conducted in phases (e.g., two part inspections)
- Inspections may be created that do not result in a fee
- Inspections may be created that are informal (e.g., walk through)
- Inspections may be created that require inspection by multiple inspectors and/or departments
- Inspection types may require entry to private property (e.g., graffiti cleanup); In this case right of entry may need to be confirmed prior to scheduling and conducting the inspection. Right of entry information (signature from property owner) must be captured in the system.

Additional Requirements:

- Inspections may be created that automatically result in a fee
- Inspection fees must be customizable to business rules, including fee types (e.g., re-inspection fee)
- The System shall provide the capability to assign a predefined weight score to inspection types based on the inspection type, project type, or other relevant predefined application information.
- The System shall provide a smart calendar to forecast dates and comply with predetermined timelines when creating an inspection
- The System shall allow coordination between departments to facilitate joint inspections.
- The System shall require Supervisor approval for overtime inspections.
- The System shall have the capability to capture electronic signature

1.6.3 Use Case: Assign and Manage Inspections

Actor:

City Inspection Supervisor (or "Supervisor")

Purpose and Objectives:

This Use Case allows a Supervisor to proactively assign, monitor, and manage Inspectors' workloads across the inspection workforce to allow the Supervisor to facilitate quality and timely inspections within acceptable performance measures.

The System will route inspection requests to departmental Supervisors based on business rules driven workflow automation. The Supervisor will be responsible for making workload assignments to their individual inspectors and the System may enforce pre-defined business rules such as such as location, skills, type of review, etc. The System will allow Supervisors to monitor workloads at all times and make adjustments as necessary to ensure the workload is distributed in the most efficient and effective manner. The System will also support the prioritization of inspections according to pre-defined business rules.

Trigger Events:

- An Applicant submits a request for an inspection that is routed to the Supervisor queue for assignment, OR
- The System has automatically generated an inspection request based on workflow

Precondition:

- The Supervisor has a user profile in the System.
- An inspection has been requested and is in queue for assignment review.
- The System has pre-defined service levels and built-in triggers for performance monitoring to feed the Supervisor dashboard.
- The System has pre-defined profiles for the Supervisor and Inspectors such as location, skills, type of inspector, etc.

Post condition:

- An Inspection Supervisor or Inspector has effectively managed the inspection workload queue.

Use Case Flow

1. The Supervisor logs into the System
2. The System displays information relevant to the Supervisor, including but not limited to information about the workload of their assigned workforce
    a. The System shall display all unassigned inspections
    b. The System shall display the workload for all his/her assigned resources, including availability and backlog for each Inspector.
    c. The System shall provide visual cues for potential issues with workload assignment (e.g. aging of workload, throughput issues, etc.

3. The Supervisor reviews the case loads and shall have the capability to make adjustments, such as re-assigning cases (or entire case loads) from one Inspector to another, balancing new assignments among reviewers, etc.
    a. The System shall have the capability to provide information on each individual Inspector, such as assigned location, specific skill sets, planned vacations, case load, etc.
4. The Supervisor may also review a list of at-risk inspections and select particular inspections that are close to not meeting, or have not met, performance metrics.
    a. The System shall provide the functionality to display the inspection information in a manner that compares current performance metrics of the inspection against typically acceptable performance of the inspection (such as Inspection A typically takes 3 days and is now beyond 5 days and still pending completion)
    b. The Supervisor shall have the capability to drill-down into specific sections of the application and inspection as necessary to research current status.
5. The System shall provide a variety of means for the Supervisor to resolve the issues, including but not limited to the following:
    a. Re-assign inspections or workloads as a whole
    b. Send a communication to the Applicant
    c. Record an internal note on the application
    d. Request additional information from Applicant (See *"Request Additional Information From Applicant"* Use Case)
    e. Update the application workflow or status to indicate escalation and action by other parties
6. The Supervisor assigns an inspection to an eligible Inspector
    a. The System shall notify the Supervisor if any assignments conflict with pre-defined business rules, such as inspection type or workload maximums
    b. The Supervisor shall have the ability to override any notification and continue with the assignment
7. Once the Supervisor has completed all actions related to monitoring and managing the workload of his assigned workforce, the System shall save all changes and update the queues for each resource.

Associations to other Use Cases:

- Use Case: Submit Inspection Request Online
- Use Case: Create Inspection

Alternative Flow:

- This use case is bypassed and the System automatically routes the Inspection to an Inspector's work queue for processing

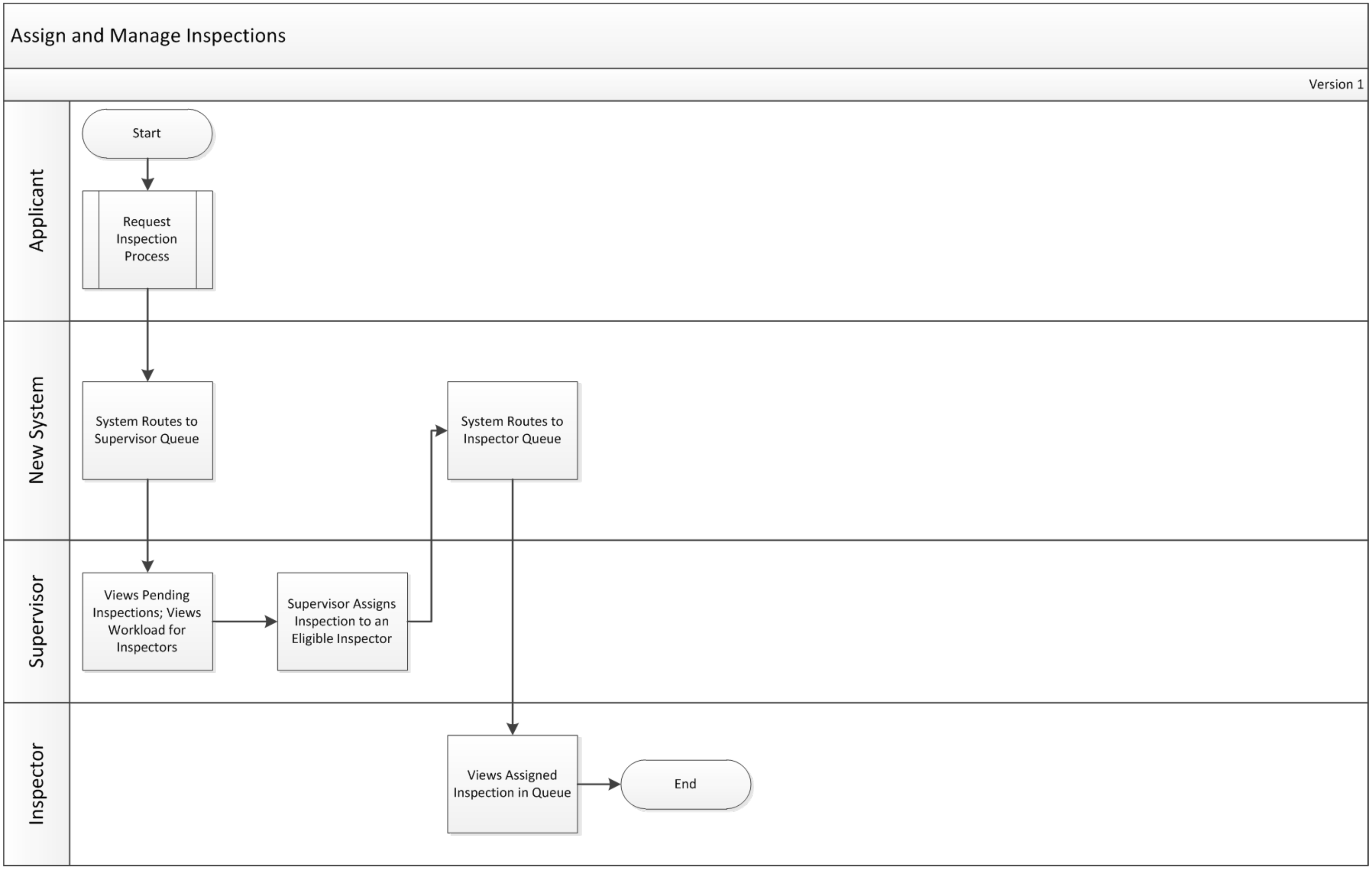
- An unexpected absence by an Inspector necessitates that the Supervisor must re-assign pending/in-process inspections to the workload of other Inspectors.
- A source external to the system, such as a phone call from the Service Manager, prompts the Supervisor to review the workforce workload for a particular issue.
- A source external to the system notifies the Inspector that a particular inspection has an issue that needs the attention of that Inspector and/or Supervisor.
- The Supervisor coordinates with outside organizations to facilitate requirements with police, etc.
- A predefined service level overrun triggers an automatic notification to the Supervisor
- The System has incorrectly auto-assigned an inspection and the Supervisor has been requested to reassign it

Additional Requirements:

- The System shall provide electronic notifications to the Supervisor when predefined performance parameters are exceeded on certain inspections or when notable events occur on certain applications/plans.
- The System shall provide the functionality to define specific performance parameters for each inspection type in the service provided by the City.
- The System shall provide the capability to categorize inspection skill-sets for employees (e.g., Fire Inspector)
- The System shall provide the capability to assign a predefined weight score to inspection types based on the inspection type, project type, or other relevant predefined application information.
- The System shall provide Supervisors the capability to override or update the automatic weights assigned.
- The System shall provide the capability of automatic assignment and scheduling of inspection based on:
  - Geography
  - Predefined territories
  - Weighted level of inspection types and availability of Inspectors’ schedules.
- The System shall provide the functionality for a Supervisor dashboard to present performance metrics in a meaningful manner
- The System shall provide a smart calendar to forecast dates and comply with predetermined timelines and assist the Supervisor in issuing correction notices.
- The System shall track the types and frequency of inspection types performed by individual Inspectors.
- The System shall allow coordination between departments to facilitate joint inspections.
- The System shall provide the capability to update, change, or create geographic boundaries.
- The System shall require Supervisor approval for overtime inspections.

- The System shall allow authorized information regarding the inspection and its status to be accessed by the Applicant via the online portal (e.g., estimated inspection date/time).
- The System shall have the capability to capture electronic signature

Figure 19. Assign and Manage Inspections Process Flow Diagram



1.6.4 Use Case: Conduct Inspection

Actor:

Inspector

Purpose and Objectives:

The purpose of this use case is to define the process of an Inspector conducting an inspection as well as perform ancillary functions that accompany mobile inspections, such as inspection routing, downloading inspection data (codes and other required city references), and researching information associated with the application.

Trigger Events:

- An inspection has been assigned to an Inspector
- An Inspector determines an ad-hoc inspection is necessary and has created it themselves

Precondition:

- The Inspector has a user profile in the System
- Inspection Assignment process has completed (if inspection is not an ad-hoc inspection)

Post condition:

- An Inspector has conducted an inspection and is ready to enter results in the System

Use Case Flow

1. An Inspector logs into their mobile unit or computer and refreshes their inspections workload.
    a. The mobile system shall provide the ability to store and forward data in online and offline modules as necessary.
    b. The mobile solution shall provide the ability to periodically refresh their inspection workload and associated datasets based on variable parameters input into the system.
2. The Inspector sorts their inspections list based on their desired order to perform inspections
    a. The System shall provide the capability to automatically generate optimized inspection routes based on predefined business rules, such as scheduled inspection times, geographic location, prioritization of inspections, etc.
        i. Or integrate with a route optimization system to perform route optimization
    b. Inspectors shall have the opportunity to receive changes to the schedule and have those changes reflected in their inspection list and routing
    c. The System shall provide the capability for the Inspector to sort their inspection list manually
3. The Inspector navigates to the location of the inspection.

4. The Inspector begins the inspection, accessing the System from his or her mobile device out in the field.
    a. The System shall provide an ability for the Inspector to review (read only privileges) application and/or project information specific to the inspection, including but not limited to:
        i. View Application / Project information and history
        ii. Access application or plans by scanning an application/inspection coversheet onsite (barcode/QR scanners would be required).
        iii. View parties (e.g., registered contractors) associated with the application/project
        iv. Access GIS viewer and data
        v. Add a new project or address to the System
        vi. Search for an address or location search to view projects associated with the site
5. The Inspector conducts his or her inspection
    a. The System shall generate a pre-defined checklist for the inspection according to inspection type.
        i. Checklists shall be configurable
    b. The System stores the date and time that the inspection was conducted
6. The Inspector records results of the inspection
    a. The System shall provide a structured template or wizard for the Inspector to record inspection results and disposition.
        i. Also support creation of a “punch list”
    b. The System shall allow the Inspector to upload picture files associated with the Inspection.
        i. The Inspector must be able to take pictures with his or her mobile device
        ii. The Inspector must be able to associate the pictures with the inspection record
        iii. The Inspector must be able to batch upload large picture sets

Associations to other use cases:

- Use Case: Assign and Manage Inspections
- Use Case: Record Inspection Outcome
- Use Case: Manage Performance Agreement
- Use Case: Manage Parent/Child Relationship Between Existing and New Land Development Applications

Alternative Flow:

- An Inspector can initiate an inspection request, perform the inspection, record the result, and record the outcome on the application for the original inspection requested
- An Inspector can initiate an inspection request, perform the inspection, record the result, and record the outcome on an application already in the system that was not part of the original inspection request, if user permissions and business rules allow.
- An Inspector can add and schedule a re-inspection, if user permissions and business rules allow.
- The System shall allow inspectors to designate his or her inspection route/schedule manually
- The Inspector may upload supporting documentation after the inspection has been conducted.
- The Inspector may be unable to complete the inspection (e.g., no show, wrong location) and must be able to indicate the reason for incompletion and reschedule the inspection
  - The System must be able to automatically generate a fee according to business rules

Additional Requirements:

- The mobile portion of the System shall provide store and forward capability so Inspectors have the capability of working in online or offline modes as necessary.
- The System shall provide the ability to periodically refresh their inspection workload and associated datasets based on variable parameters input into the system.
- The System shall provide an ability to transmit data in a bidirectional fashion from the field based to/from the System based on predefined intervals (e.g. mobile sync every 5 mins).
- The System shall have the ability to automatically transmit inspection results from the mobile device into the backend System.
- The System shall provide an ability to limit the frequency and scope of data to be periodically synced in order to optimize data traffic and mobile performance.
- The System shall have route optimization capabilities
  - Routes should be updated real-time as inspectors progress with work during the day
  - Routes should be updated with any same day changes to the inspection route
  - The System shall graphically display inspection locations on a map for both the inspector mobile device
  - The System shall graphically display a dashboard for Supervisors to monitor inspectors' progress and support changes in inspection assignments if necessary.
  - The System shall have the ability to automatically optimize inspection schedules for individual inspectors and inspection teams based upon pre-defined criteria, such as inspection routes and inspection weighting
  - The System shall have the ability to automatically optimize inspection schedules and routes through GIS integration

- ❑ The System shall have the ability to automatically determine inspector travel time based on multiple criteria (e.g., previous inspection location, does inspector have vehicle, time of day, etc.)
  - – The System shall be able to display estimated time of arrival on the online portal for customers within a predefined time period (e.g., four hour window) or a notification they he or she is next to be inspected.
- The System shall have the capability to integrate with a route optimization tool

1.6.5 Use Case: Record Inspection Outcome

Actor:

Inspector

Purpose and Objectives:

The purpose of this use case is to define the process of an Inspector conducting an inspection recording the inspection outcome in the System, which may include pass or failure of the inspection.

Trigger Events:

- An inspection has been assigned to an Inspector
- An Inspector determines an ad-hoc inspection is necessary and has created it themselves

Precondition:

- The Inspector has a user profile in the System
- Conduct Inspection process has completed (see Use Case: Conduct Inspection)

Post condition:

- An Inspector has captured inspection results in the System
- The System triggers any downstream workflow tasks related to the outcome of the inspection result

Use Case Flow

1. The Inspector logs into their mobile unit or computer and selects to enter in the outcome of the Inspection.
2. The Inspector selects to enter Pass or Failure
   a. If the Inspector indicates the passage of the inspection, the System will trigger any downstream workflow activities, which may include final project clearance (e.g., Certificate of Occupancy) (see Use Case: Manage Final Project Clearance)
   b. The System shall provide a template for the Inspector to issue any corrections or provide feedback regarding the failure of an inspection.
      i. The template shall include any pre-defined language for a comment type
      ii. The template shall include any standard DSD language

iii. The Inspector shall be able to highlight/indicate on the plans areas that need to be modified as well as be able to fill out a feedback section in a structured format, providing clear instructions to the Applicant what modification is required.

iv. The System shall maintain a history of all markups and markup layers

1. Inspector name and department
2. Date and time stamps

c. The system shall allow the Inspector to provide specific code numbers and sections that may be in violation and include them in the feedback.

d. The System will generate a correction notice and any other relevant paperwork (e.g., red tag)

e. The System will allow the Inspector to review documents submitted with inspection request and provide mark ups to these documents as part of rejection comments.

f. The System will allow the Inspector to record that a re-inspection is required and capture any relevant conditions and/or deadlines in the System

3. The Inspector submits the inspection outcome and disposition.
4. The Inspector shares the results of the inspection with the Contractor and/or Property Owner according to business rules

a. The System shall support onsite printing of an inspection report and any other necessary paperwork via a mobile printer in the Inspector's vehicle.

b. The System shall support emailing of inspection report to customer

i. The System shall also support SMS capability

5. The System shall trigger any downstream activities governed by business rules driven workflow, including but not limited to the following:

a. Final Project Clearance (e.g., COO Issuance)

b. Re-inspection scheduling

c. Fees

d. Notifications

e. Updates to project status

f. Transmission of information via interfaces to external agencies (e.g., CPS)

Associations to other use cases:

- Use Case: Assign and Manage Inspections
- Use Case: Conduct Inspection
- Use Case: Manage Performance Agreement
- Use Case: Manage Parent/Child Relationship Between Existing and New Land Development Applications

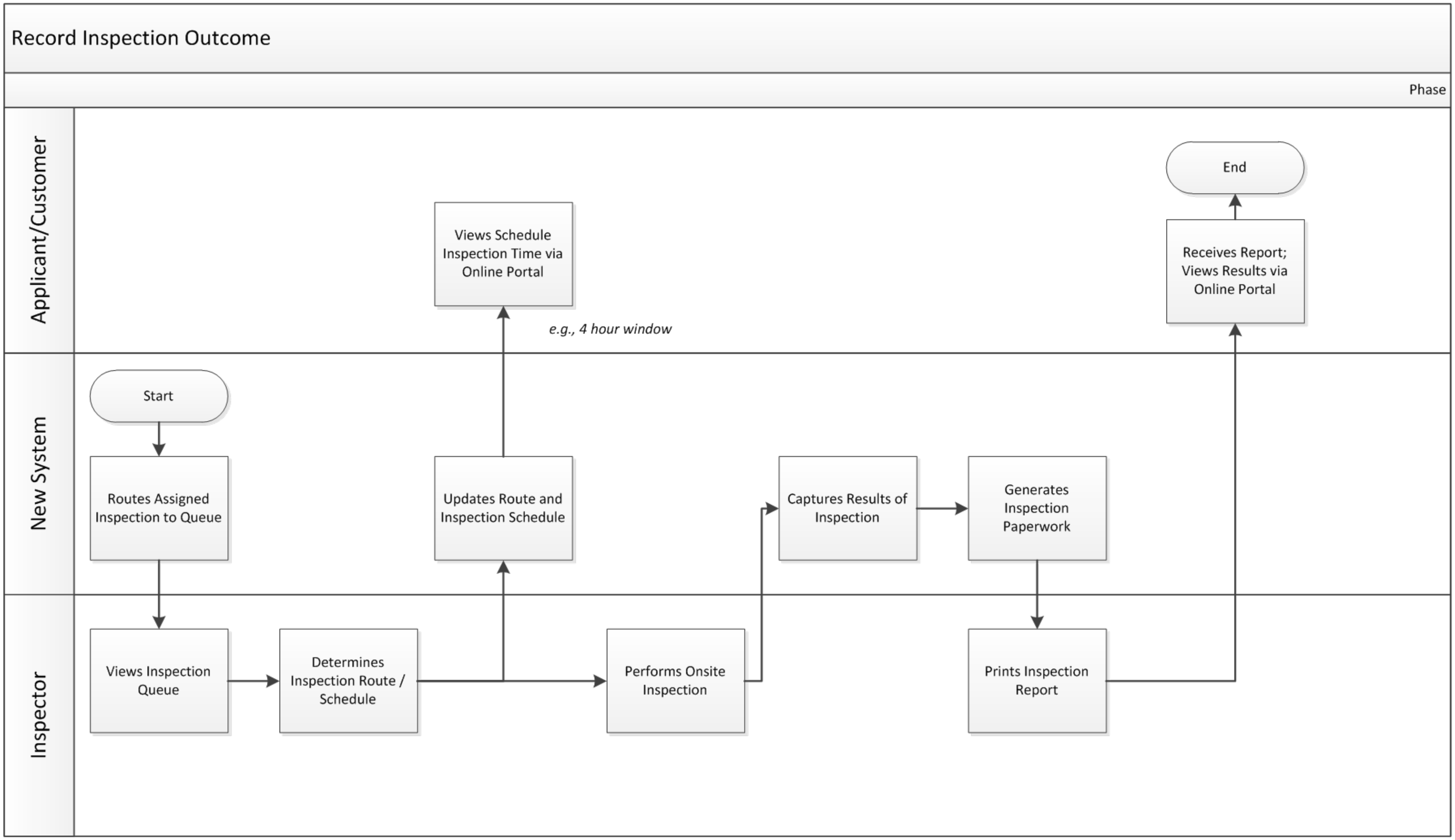
Alternative Flow:

- An Inspector can initiate an inspection request, perform the inspection, record the result, and record the outcome on the application for the original inspection requested
- An Inspector can initiate an inspection request, perform the inspection, record the result, and record the outcome on an application already in the system that was not part of the original inspection request, if user permissions and business rules allow.
- An Inspector can add and schedule a re-inspection, if user permissions and business rules allow.
- The System will support the generation and issuance of enforcement-related documentations as part of an inspection (see *Use Case: Issue a Citation or Notice of Violation*)
- The Inspector may upload supporting documentation after the inspection has been conducted.
- An Inspector conducting a regulatory inspection may utilize the identification issued from the System to identify any potential violations (e.g., Scan the bar code on a System-issued decal present on a vehicle using a bar code scanner, to ensure the decal is associated with that particular vehicle in the System).
- An Inspector may issue a Stop Work Order, preventing a portion or all work on a project from occurring until the identified issue is resolved
- As part of the Inspection outcome, an Inspector must be able to flag that a location is eligible for a utility release (see Use Case: Issue Utility Release)
- As part of an Inspection outcome, an Inspector may need to perform cleanup work (e.g., graffiti abatement). The System must have the ability to capture the work performed, including details such as square footage, time of work, officers performing the work, before and after photos, mileage, product used, etc.
  - The System should help the Inspectors determine any product and the amount needed to perform the cleanup work (e.g., cheat sheet for square feet and gallons of paint needed to cover graffiti)
  - The System should allow the status of the cleanup work to be captured
  - The System should support the cleanup work to be assigned to another group, deferred, etc.
- Cleanup work may be performed proactively (e.g., proactive graffiti abatement); This work effort should be tracked in the System according to the same requirements above.
- As part of an Inspection outcome, the Inspector/Code Officer determines that a Work Order is needed to initiate services by the City to resolve the violation. The System will support the generation of a Work Order template, pre-populate with property information, which can be customized by the Inspector/Code Officer. The document may be routed to various personnel for approval and subsequently electronically assigned and distributed to a Contractor.
  - The System will track the status of the work order (i.e. awaiting approval, awaiting contractor assignment, work in progress)

Additional Requirements:

- The System shall trigger downstream workflow activities related to the submission of an inspection result, such as the release of a bond (see *Use Case: Manage Performance Agreement*)
- The mobile portion of the System shall provide store and forward capability so Inspectors have the capability of working in online or offline modes as necessary.
- The System shall provide the ability to periodically refresh their inspection workload and associated datasets based on variable parameters input into the system.
- The System shall provide an ability to transmit data in a bidirectional fashion from the field based to/from the System based on predefined intervals (e.g. mobile sync every 5 mins).
- The System shall have the ability to automatically transmit inspection results from the mobile device into the backend System.
- The System shall provide an ability to limit the frequency and scope of data to be periodically synced in order to optimize data traffic and mobile performance.
- The System shall provide the ability to print an inspection result ticket, or other notification, to a mobile printer in the Inspector's vehicle.
- The System shall provide a digital copy of Inspectors' signatures/sign-offs for the Applicant to print prior to subsequent inspections.
- The System shall provide the ability to allow Applicants or other project representatives (e.g. Contractor, Agent) to digitally sign an inspection communication in the field on a touch-screen-like mobile unit (e.g. signing a UPS digital device for a UPS package upon delivery).
- The System has the capability to trigger the notification or corrections based off the result type entered into the results field.
- The System shall provide functionality for Engineers to sign off/attach work completions to facilitate bond releases.
- The System shall be able to identify scheduled inspections that do not have an associated inspection outcome (e.g., orphaned inspections)
- The System shall have the capability to capture electronic signature
- The System shall support the ability to dictate inspection results into a device (e.g., iPhone) that then converts the voice record into text in the System
  - Alternatively, the System shall support integration with a tool that has this capability

Figure 20. Record Inspection Outcome Process Flow Diagram



1.6.6 Use Case: Issue Utility Release

Actor:

Departmental City Permit Staff (or “Permit Staff”)

Purpose and Objectives:

The purpose of this use case is to outline the process of Permit Staff communicating to an external utilities company (e.g., CPS) that a location is eligible for a utility release.

Trigger Events:

- Existing location is eligible for a utility release per Inspector

Precondition:

- Inspector conducts inspection

Post condition:

- Utility release has been communicated to the utility company.

Use Case Flow

1. An Inspector conducts an Inspection (see *Use Case: Record Outcome of Inspection*)
2. Inspector flags the location in the System as eligible for a utility release.
3. The System periodically compiles all locations eligible for a utility release (e.g., twice a day) into a notification that can be sent to the utility company and/or external agency such as SAWS or CPS via a report or email
    a. The System shall include any location or project information required by the utility company to process the utility release
    b. The System shall provide information that can be utilized to generate work orders
4. The System updates the project with a status update that the utility release has been sent to the utility company.
5. The System shall notify the Applicant according to his or her communication preferences; The Applicant may also view the status of the request on the online portal.

Associations to other use cases:

- Use Case: Conduct Inspection
- Use Case: Record Outcome of Inspection

Additional Requirements

- The System shall have the ability to capture electronic signature

1.7 Complaints & Enforcement Use Cases

If at any point a City Customer (i.e. Applicant, Property Owner, Licensee) is found to be out of compliance with City rules and regulations, whether it is due to a failed inspection or series of complaints, an investigation or inspection may be conducted and a resulting enforcement-related document is issued against the Customer. This set of Use Cases assists Customers and City Employees with managing the associated complaints and enforcement processes.

1.7.1 Use Case: Record Violation

Actor:

Authorized City Enforcement Staff ("Enforcement Staff"), such as a Code Enforcement Officer or Inspector

Purpose and Objectives:

This Use Case describes the process Enforcement Staff will follow to record a violation, typically resulting in the issuance of enforcement-related document such as a Citation or Notice of Violation.

Trigger Events:

- An event such as an Inspection, Violation Report, or Code Enforcement Investigation has resulted in an enforcement action against an owner of a property or project.

Precondition:

- The project/property exists in the System
- Results of an inspection or investigation have been documented and recorded in the System (see Use Case: *Conduct Inspection* and *Use Case: Manage Complaints)*, and an enforcement-related action is required

Post condition:

- The Enforcement Staff has issued an enforcement-related document and communicated it to the property/project owner

Use Case Flow:

1. Enforcement Staff determines that a violation has occurred
2. Enforcement Staff determines the violation must be formally noted and an enforcement-related document must be issued to a property owner in response to a violation stemming from an inspection and/or investigation.
    a. The System shall support the issuance of various enforcement document types according to business rules (i.e. Citation, Notice of Violation, Compliance Agreement, Warning)
    b. The System shall support templates and document generation for the various document types
3. Enforcement Staff logs into the system and searches for the offending project.
    a. System shall support search by address

4. Enforcement Staff selects the option to issue an enforcement-related documentation and enters all necessary information in the System.
    a. The System shall generate a template for the enforcement-related documentation including but not limited to the following:
        i. Type of Enforcement Document (e.g., Citation, Notice of Violation, Compliance Agreement)
        ii. Date of Inspection/Investigation
        iii. Investigator Assigned
        iv. Codes in violation
        v. Required actions
        vi. Fine(s)
        vii. Court date
            1. The System shall have the ability to automatically schedule a court date according to business rules, as well as to manually schedule
    b. The System shall allow Enforcement Staff to enter, upload or attach the inspection report and any other supporting documentation (i.e. pictures, zoning regulations, etc.)
    c. The System shall allow Enforcement Staff to add free text notes and comments in the System relating to the issuance
    d. The System shall allow Enforcement Staff to select various enforcement options, such as a Stop Work Order
        i. The System shall update project statuses according to business rules based on the enforcement order issued. For example, if a Stop Work Order is issued, the project status shall be updated accordingly and subsequent actions will be prevented (e.g., Issue COO) until the violation has been resolved.
        ii. The System may automatically schedule a re-inspection according to business rules.
        iii. The System may notify City personnel – and or trigger an enforcement action automatically - if certain business rules are met. For example, if a property owner accrues two or more property violations within a certain time period he or she may be required to register as an absentee property owner.
            1. The registration involves submitting an online application (see *Use Case: Submit Application Online*), which also includes paying an annual fee (see *Use Case: Submit Payment Online*).
5. The System shall compile all data associated with the violation into a single document and attach it to the enforcement action record for future reference.
6. Enforcement Staff provides a copy of the enforcement-related documentation to the Property Owner
    a. The System will also make this information available on the online portal

   b. The System shall allow for emailing of document
   c. The System shall support the printing of the document out in the field via a mobile printer
7. Enforcement Staff submits the enforcement-related documentation to the City of San Antonio judicial system (e.g., Municipal Court), where the enforcement-related documentation is further processed.
   a. The System shall support an interface with the Court Case Management System
   b. The System shall also support the printing and mailing of the documentation (outside of the System)
8. The System updates the complaint record with data received from the Court System (via interface) as the complaint is processed, including but not limited to the following:
   a. Case Dates (i.e. arraignment, hearings)
   b. Disposition
   c. Payment History

Alternate Flows:

- Enforcement Staff may coordinate with the Supervisor and/or Complaint Investigator to determine if an enforcement-related action is warranted and must be issued.
- Enforcement Staff may manually update the complaint record with results from the Court System
- Enforcement Staff may issue a warning if the situation does not warrant a formal violation. Enforcement Staff may monitor the situation, perform follow up inspections, and other actions in order to bring the customer to compliance.
- In some scenarios, an Enforcement Officer collects payment for a citation out in the field (e.g., solicitation permit). Once an Officer takes possession of the funds, he or she then is responsible for putting the funds in the property room. The System should allow the Officer to indicate he or she has taken funds and allow for future tracking of the funds.

Associations to other Use Cases:

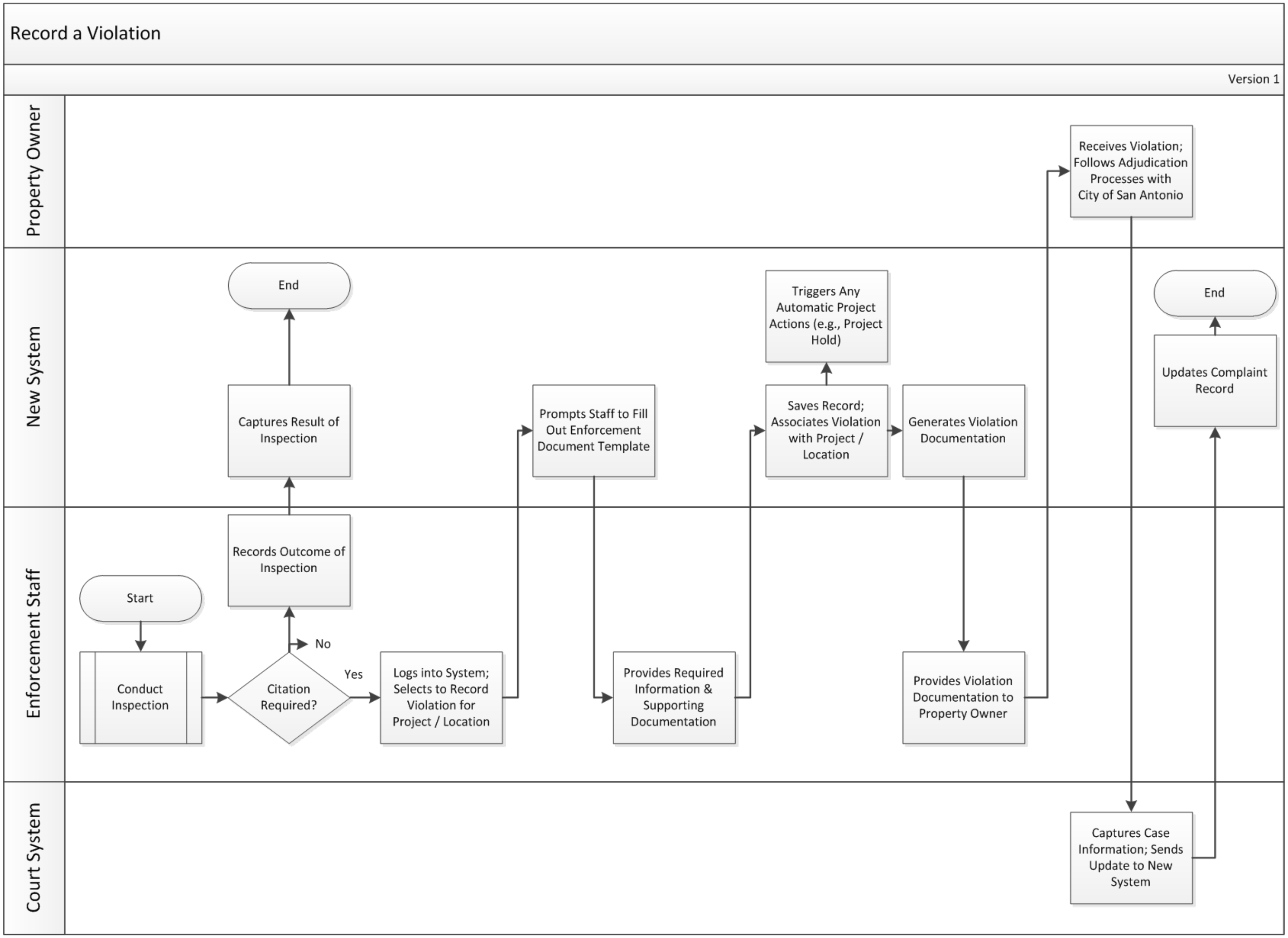
- Use Case: Conduct Inspection and Record Outcome
- Use Case: Report a Complaint
- Use Case: Manage Complaints

Additional Requirements:

- The System shall provide a smart calendaring feature that will allow for the system to auto fill documents with dates.
- The System shall support an interface with the existing Court Case Management System.
- The System shall support printing of violations, citations, etc. out in the field

- The System shall have the capability to capture electronic signature
- The System should allow for an Enforcement Officer to indicate he or she has taken video that should be logged as evidence for a citation they have written (e.g., “video flag”).
- The System must be able to track the number of false alarms at a location.
- The System must support integration with the CAD System

Figure 21. Record Violation Business Process Flow Diagram



1.7.2 Use Case: Report a Complaint

Actor:

Any individual desiring to submit a complaint (Complainant)

Purpose and Objectives:

This Use Case describes the process of a Complainant submitting a complaint about a potential violation via the New System's online portal.

Trigger Events:

- The Complainant identifies what they believe may be a violation of any code, permit, or license, and desires to file a complaint with the City.

Precondition:

- The System is configured with pre-defined complaint types for the Complainant to select from, to ensure that the Complaint or potential violation is related to development services or code enforcement.
  - Note: There is no need to log into a system account to submit a Complaint via the portal.

Post Condition:

- The Complainant has submitted a complaint through the online portal.

Use Case Flow:

1. The Complainant navigates to the online portal and selects the "Report a Complaint" option.
2. The System shall prompt the Complainant to provide contact information (or sign in with their user credentials if the Complainant has an account with the online portal).
   a. The System will also allow an "anonymous" option.
3. The System shall prompt the Complainant to enter information about the possible offense and provide a structured format (e.g. drop-down driven template) to enter information such as location (address, street number, cross streets, identify on a map, etc.)
   a. Based on the information provided, the System shall display information authorized to display to the public for that address (i.e. open permits, entitlements, clearances, and conditions)
   b. The System shall display a predefined list of possible potential violations or complaints for the Complainant to select.
   c. The Complainant selects a complaint type from the list.
   d. The System shall prompt the Complainant to select a type of suspected offense.
   e. The System shall allow the Complainant to add comments in a comment box.
4. The System shall prompt the Complainant to review the complaint before final submission.
5. The Complainant submits the complaint

6. The System provides the Complainant a complaint number confirming submission and for tracking purposes.
    a. As the complaint is processed, the Complainant will be able to access the online portal and view action taken on his or her complaint.
7. The System routes the complaint it to the responsible Department Supervisor for review and processing.

Alternate Flows:

- If the complaint is of general nature and not specifically related to an existing project, the System shall provide the Complainant a notification on how to resolve the issue outside of the System (i.e., contact 311, submit a complaint through the City's 311 online portal).
- If the complaint comes in through the general 311 Call Center the System shall provide functionality for City Personnel to manage them through the New System
    - The System will interface to the City's 311 system for complaints originated from the New System and for those complaints generated from the 311 System

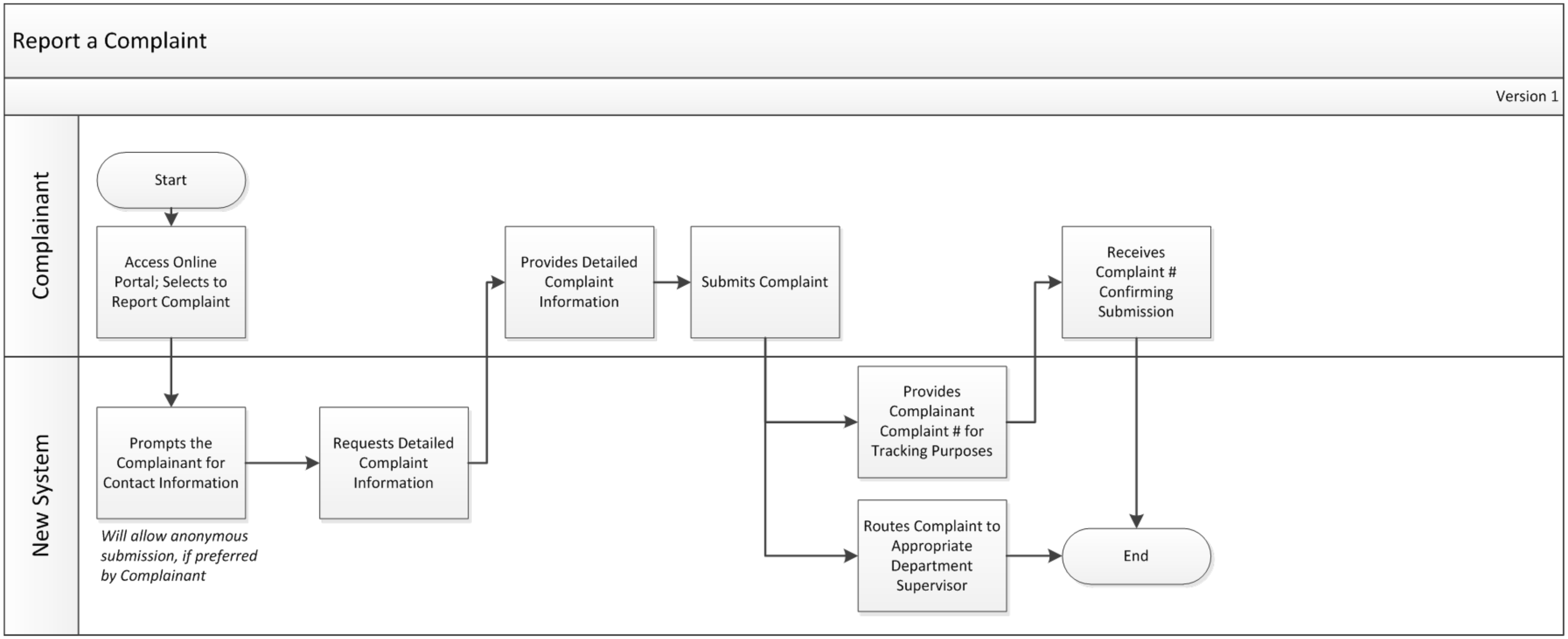
Associations to other Use Cases:

- Use Case: Manage Complaints
- Use Case: Record Violation

Additional Requirements:

- The System shall create a complaint ID for the tracking of the complaint.
- The System shall group complaints by property.
- The System shall be able to track customer service requests by Complainant (if contact or account information provided).
- The System shall be able to integrate with other preexisting city applications to provide information about specific properties.
- The System shall be able to integrate with existing department-level complaint systems, bi-directionally.
- The System shall have the capability to capture electronic signature

Figure 22. Report a Complaint Process Flow Diagram



1.7.3 Use Case: Manage Complaints

Actor:

Complaint Investigator ("Investigator")

Purpose and Objectives:

This Use Case outlines the process of a Complaint Investigator reviewing, processing, and closing a complaint.

Trigger Events:

- A Complainant has submitted a complaint, which has been systematically assigned and routed to the appropriate business unit to investigate the complaint

Precondition:

- The Report a Complaint process has been completed successfully (see *Use Case: Report a Complaint*)
- Each business unit has designated a Supervisor or other personnel in the System to process complaints ("Complaint Investigator")

Post condition:

- The Complaint Investigator has reviewed the complaint, recorded the disposition in the System, and notified the complainant of the outcome

Use Case Flow

1. The Complaint Investigator logs into the system
2. The System displays information relevant to the user, including but not limited to a queue of pending complaints.
    a. The System shall allow the Complaint Investigator to view and sort complaints according to a variety of criteria, including but not limited to:
        i. Complaint Type (i.e., Permit Inspections, Code Enforcement)
        ii. Date Received
        iii. Priority
3. The Complaint Investigator will review the complaints, as well as any attached documentation provided by the Complainant.
    a. The System shall display all pertinent information including:
        i. Origin (i.e. call, email, 311 System)
        ii. Open permits
        iii. Complaint history of both the property and the complainant
        iv. GIS information
        v. Etc.

   b. The System shall allow the Complaint Investigator to request additional information from the Complainant (see *Use Case: Request Additional Information*).

4. After reviewing the complaint, the Complaint Investigator routes the complaint to an Inspector (or Inspector Supervisor) for review and assignment (see *Use Case: Assign Inspection*).
   a. The Complaint Investigator may also conduct the inspection his or herself (see *Use Case: Conduct Inspection*)
5. Once an inspection has occurred (Use Case: Conduct Inspection has been completed) and the Inspector has recorded the results in the System (Use Case: Record Inspection Results), the System shall notify the Complaint Investigator that the inspection has been completed.
   a. The Inspector may have issued a violation as a result of the inspection (see *Use Case: Record Violation*)
6. The Complaint Investigator reviews the inspection outcome and any information associated with the inspection (e.g., pictures).
7. The Complaint Investigator makes his or her determination as to how to resolve the complaint and updates the System accordingly.
   a. The System shall have the ability to place a hold on the project and/or location.
   b. The System shall allow the Supervisor to close the complaint.
8. The System updates the status of the complaint and sends any notification to the Complainant and/or Property Owner according to pre-defined business rules
   a. The Complainant and/or Property Owner may also view authorized information about the complaint on the online portal.

Associations to other Use Cases:

- Use Case: Report a Complaint
- Use Case: Record Violation
- Use Case: Assign Inspection
- Use Case: Conduct Inspection
- Use Case: Record Outcome of Inspection

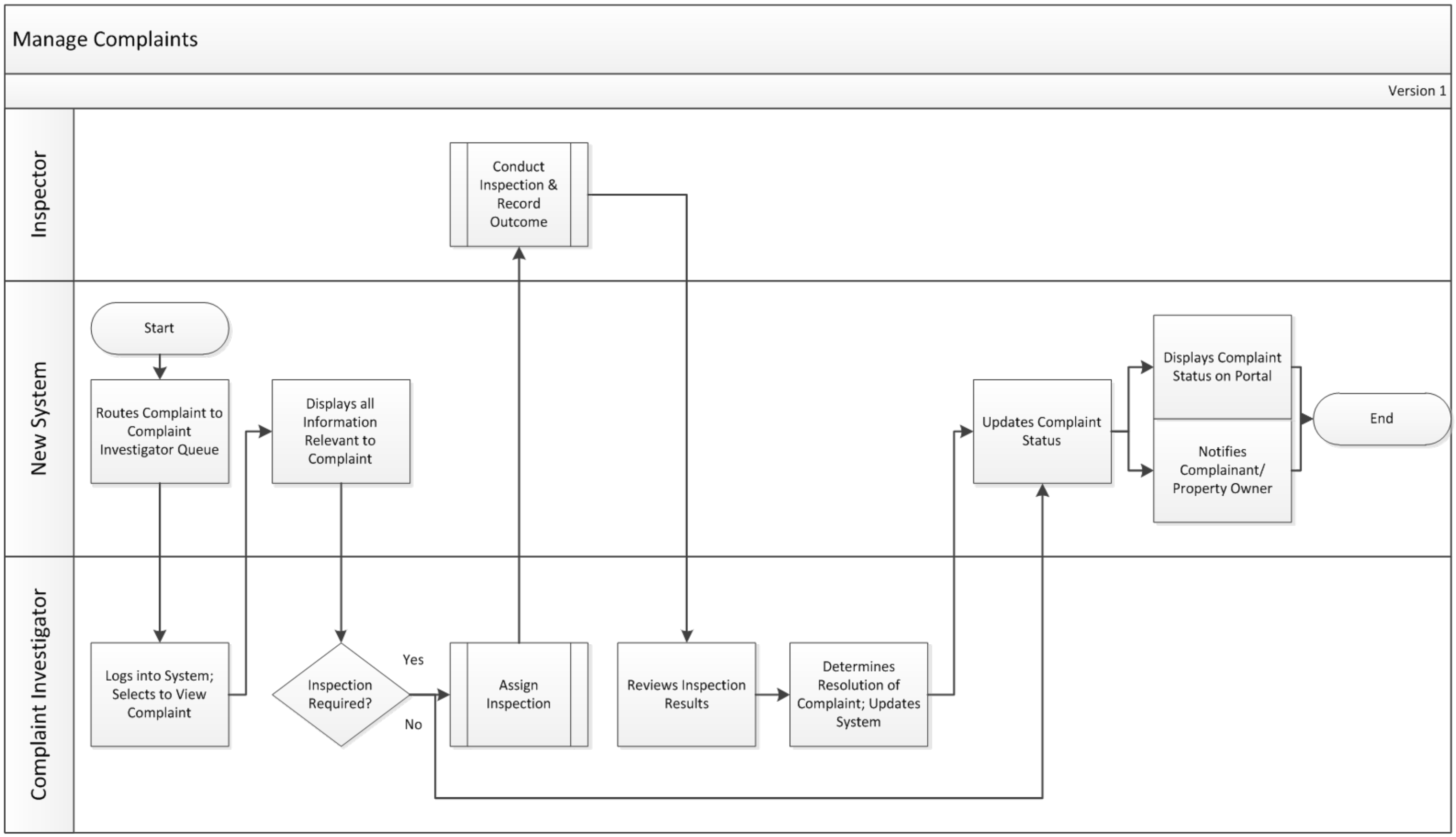
Alternative Flow:

- A Complaint Investigator may determine that an inspection is not warranted and resolve the complaint without assigning an inspection to an Inspector
- The Complaint Investigator may conduct in the inspection his or herself, record the results, issue any violations, etc.
- A Complaint Investigator shall have the ability to communicate with a complainant in regards to a complaint to request additional information or close the issue.

Additional Requirements:

- The System shall support an interface with the City's existing 311 System at initial intake of complaint and exchange information between the systems as updates or actions are taken on the complaint.
- The System shall allow the personnel to flag any information that is not public record and/or should not be displayed in the online portal.
- The System shall have the capability to capture electronic signature

Figure 23. Manage Complaints Process Flow Diagram



1.8 Finance & Cashiering Use Cases

This set of use cases cover the overall financial processes associated with the Hansen-ECCO Replacement System, including processes like payments, refunds, receipting, and invoicing.

1.8.1 Use Case: Submit Online Payment

Actor

Applicant

Purpose and Objectives

The Applicant must pay for fees related to services obtained from DSD, or other related fees or fines. This Use Case outlines the process of an Applicant submitting online payments via the portal. Alternate flows identify alternative methods of payment, such as submitting via a City office or through the mail. Reducing counter traffic is a goal of the Hansen-ECCO Replacement solution and providing an easy, convenient, and secure method to pay for all application fees online is critical to satisfying this goal.

Trigger Events

- An Applicant has one or several different types of fees associated with an online application transaction, such as an application fee, inspection fee, permit fee, etc. and payment is required before the application process can continue.

Precondition

- Applicant has a user account with the System.
- Applicant has created an application that is saved in the System.
- The application is in a status that requires payment.

Post condition

- The payment is submitted directly into the System and stored with the appropriate System record (e.g., an application).
- The System automatically updates the application record to generate a receipt, progress workflow, update application status, and trigger electronic notifications.
- The System automatically distributes funds to the appropriate accounts on the backend.

Use Case Flow

1. The Applicant logs into the System and accesses his or her user account.
2. The System displays relevant user information, including but not limited to pending applications for which a payment is due.
    a. Alternatively, the System shall allow the Applicant to view and sort any pending fee payments in an ad-hoc manner.
3. The Applicant identifies the outstanding payment(s) he or she would like to resolve, and selects an option that allows fee payment.

   a. The System shall allow an Applicant to pay for multiple pending fees on multiple applications at the same time in one transaction (i.e. shopping cart).
   b. The System shall allow the Applicant to choose one or more fees (or a subset of fees due) they wish to pay.
4. The System shall guide the Applicant through the payment process, displaying available payment options including but not limited to the following:
   a. Credit card
   b. Cash
   c. Electronic Check
   d. Escrow Account (if previously set up by Applicant) (see Use Case: Request Escrow Account)
5. The Applicant enters and submits required payment information
   a. The System shall allow the Applicant to save preferred payment method/options for future use (i.e. credit card and billing information).
6. Upon successful completion of the payment process, the System updates the status of the application and advances the application to the next step in the defined workflow for processing the application.
7. The System shall disburse the collected payments to the appropriate accounts according to pre-defined business rules.
   a. The System shall have the capability to submit detailed payment information to the City's financial System, including but not limited to:
      i. Internal Order Number
      ii. GL Account Number
      iii. Total Revenue Collected by Date
      iv. Tender Type
8. The System shall provide a receipt option for the user to print a copy of his or her receipt, which may include relevant application information, such as fee type, transaction date, method of payment, application number, etc.
   a. The System shall associate the receipt with the application as an original document that is available for future retrieval.
   b. The System shall allow the user to create itemized receipts by payment or application
9. The System stores the transaction record as payment history in the System including but not limited to the following detailed payment information:
   a. Payer information
   b. Payment information (e.g., credit card type, number)
   c. Date and time of payment
   d. Amount received per service component (e.g. permit)
      i. Itemize the fee paid

Associations to other Use Cases

- Use Case: Submit Application Online
- Use Case: Manage License Renewals
- Use Case: Submit License Registration Online
- Use Case: Submit License Renewal Online
- Use Case: Request Escrow Account
- Use Case: Manage Permit Renewals
- Use Case: Request Additional Information from Applicant
- Use Case: Record Payment Made in Person

Alternative Flows

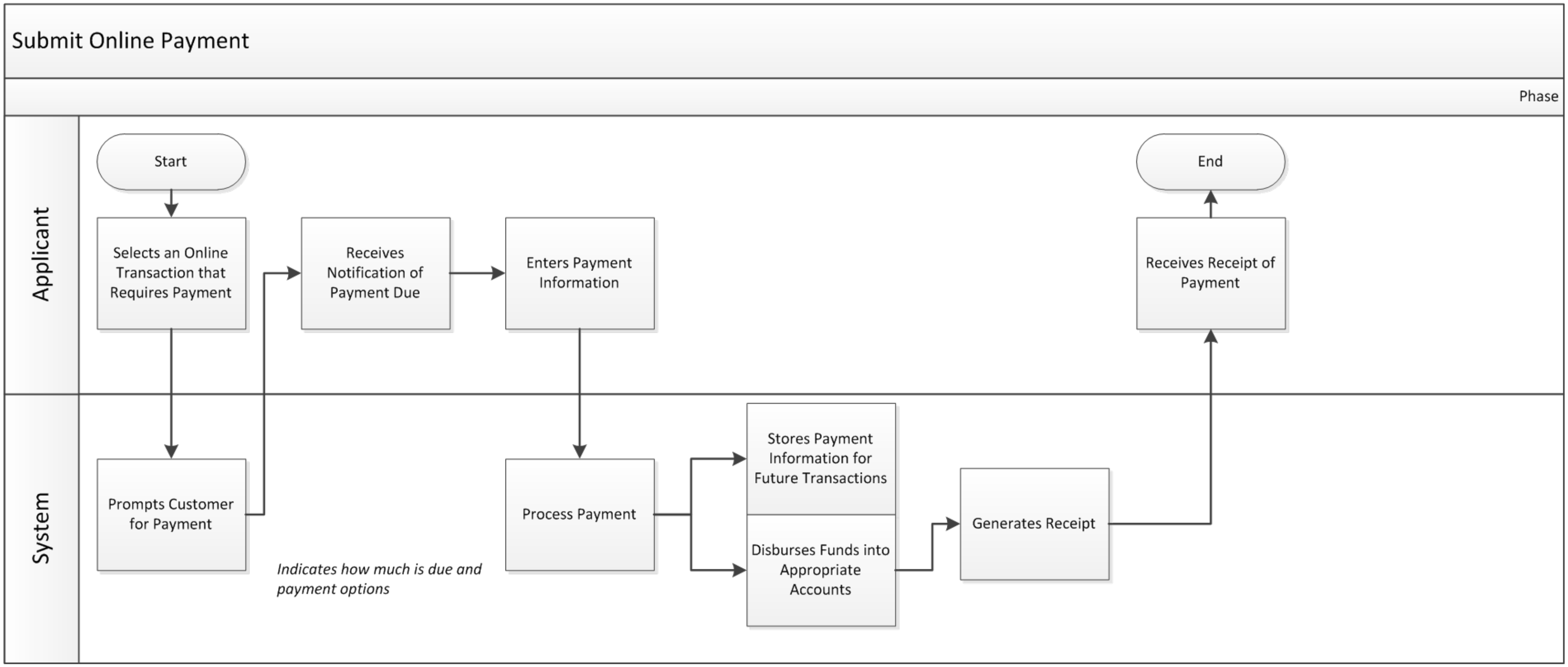
- An Applicant has one or several different types of fees associated to a payment notice he or she has received, such as a permit renewal fee. The Applicant may receive this payment notice via email, in person from City staff (e.g., Inspector), or through the mail. The payment notice will contain all information necessary for the Applicant to process his or her payment online, such as portal log-on instructions.
- An Applicant may perform the Submit Online Payment process in person at the DSD (see *Use Case: Record Payment Made in Person*)
- The System will allow the Applicant to select a "pay in person" option (see *Use Case: Record Payment Made in Person*). The System will provide detailed payment instructions outlining the exact steps the Applicant will need to take to complete payment. The Applicant may print out a document from the System (e.g., sales order) that contains all the information necessary for the Applicant to process his or her payment in person.
  - Alternatively, the System will allow the Applicant to select to "pay by mail." The process will be the same as above, except instead of visiting the DSD in person, the Applicant will mail his or her payment to the DSD.
- The System will allow for fees to be waived or for certain users to be exempt from fees (e.g., another government agency) according to pre-defined business rules.
- The System will allow a Customer to insert a comment for them to track their payments (such as a PO number of WBS Code and GL Codes). This would allow Capital Improvement Departments to track construction costs on City projects.

Additional Requirements

- The System shall allow for configurable fee types
- The System shall allow fees to be collected at various points in the workflow process according to pre-defined business rules for a transaction or permit type
- The System shall support periodic invoicing and payment of invoices.

- The System shall allow an Applicant to group multiple fee types and pay them together, including payments for related to multiple applications (shopping cart concept).
- The System shall allow integration with other existing finance Systems, such as the Cashiering Point of Sale System and Finance System.
- The System shall support the required City reconciliation procedures, including but not limited to the following:
  - Track Finance System ID (SAP) numbers for transactions
  - Capture tender type for transaction
- The System shall allow the application of an administrative fee for application processing
- The System shall allow for fee estimation (e.g., A shopping cart that increases or decreases in value according to the selects made by the Applicant as part of the online application process)
- The System shall allow for the applicant to pay using multiple tender types within one transaction
- The System shall have the capability to capture electronic signature

Figure 24. Submit Online Payment Process Flow Diagram



1.8.2 Use Case: Record Payment Made in Person

Actor:

Cashier

Purpose and Objectives:

This Use Case outlines the process of a Cashier recording a payment that was submitted by the Applicant at a City office.

The ideal future state would be to offer Customers a full mixture of payment options, including the ability to submit payments online via the portal, in person, or via mail. Regardless of how effective DSD is at promoting online transactions there will always be a need for a Cashier to record a payment directly into the System.

Trigger Events:

- An Applicant has saved or submitted an application via the online portal and has selected the ‘Pay in Person option’ OR
- An Applicant has completed the application process with an Intake Staff member from the appropriate department, but needs to submit payment in order to complete the application.

Precondition:

- The Applicant owes payment to DSD.

Post condition:

- A City Employee has recorded the payment directly into the System and the application record is updated.

Use Case Flow

1. The Applicant goes to DSD to submit payment.
2. The Applicant presents the Cashier with the cover sheet generated by the System.
    a. If the Applicant does not have the cover sheet then the City Employee is able to search the System through a variety of methods in order to find the application and associated fees, such as address/parcel, Applicant name, service/permit type, etc.
3. The Cashier will use the reference number from the cover page to retrieve the Applicant’s account information.
4. The System indicates the amount(s) due from the Applicant.
5. The Applicant provides payment to the Cashier.
6. The Cashier accepts the payment from the Applicant.
7. The Cashier will process the payment transaction directly in the Cashiering System.

8. The Cashiering System will transmit the appropriate payment data required for reconciliation and project payment history via interfaces with both the existing Finance System and the new Permitting System
    a. The new System stores the transaction record as payment history for the Applicant and associated project(s).
9. The Cashier shall provide a receipt for the user to indicate they have satisfied their payment obligations
    a. The System shall associate the receipt with the application as an original document that is available for future retrieval.
10. Upon successful completion of the payment process, the System updates the status of the application and advances the application to the next step in the defined workflow for processing the application.

Associations to other Use Cases:

- Use Case: Submit Online Payment

Alternative Flow:

- The System will allow the Applicant to select to “pay by mail” from the portal’s online application service. The process will be the same as above, except instead of visiting the DSD in person, the Applicant will mail his or her payment to the DSD. The Cashier will process the payment based on the documentation and payment information provided by the Applicant in the mail.
- The System shall support the enforcement of business rules related to payment, such as a permit number cannot be issued until after payment has been processed.
- The System shall support batch processing of transactions
- A Cashier may intake a check as payment (either through payment made in person or through the mail). The bank returns the check, indicating that there are insufficient funds (e.g., bounced check). The Cashier will update the status of the transaction to indicate the check has bounced. The System shall enforce holds on the location, project, and/or license holder according to pre-defined business rules until the issue is resolved (for example, an Applicant may not be penalized if the check was returned for a stop payment or signature issue).
    - The System shall send notification to the Applicant of the issue
    - The System shall make information available to the Applicant on the online portal
    - The System shall track the accumulation of further payment issues and apply any pre-defined business rules that limit an Applicant’s use of a payment type (e.g., 3 strike rule)
    - The System shall allow City Employees to view and sort the list of returned checks and be able to remove the checks from the list when resolved

Additional Requirements:

Gartner

- The System shall allow for a common cashiering platform across all participating departments.
- The System shall allow for the back-end distribution and fund accounting of all transactions input into the System directly, via the portal, or via City staff.
- The System shall have the capability to capture electronic signature

1.8.3 Use Case: Request a Refund

Actor:

Applicant

Purpose and Objectives:

Under certain circumstances, Applicants may request a refund from the City for fees initially paid for an application. Such refunds – which can be partial or full refunds of a fee - need to be reviewed and approved by a departmental Intake Staff. This Use Case outlines the process for Applicant to request a refund through the online portal.

Trigger Events:

- The Applicant has decided to withdraw an application OR
- The Applicant has decided to change the scope of an application OR
- The Applicant was overcharged a fee OR
- An ad-hoc determination is reached by the City to refund all or part of a payment

Precondition:

- The Applicant has created a user account
- A fee payment has been made

Post condition:

- The Applicant has requested a refund to a payment and the request has been routed to the appropriate department for review.

Use Case Flow

1. The Applicant accesses the online portal and logs in.
2. The System displays relevant user information, including but not limited to fees and payments information.
3. The Applicant selects to view the history of payments processed.
4. The Applicant selects the particular payment for which they desire to request a refund.
    a. The System shall provide the functionality for the Applicant to see whether all or part of the payment is eligible for refund.
5. The Applicant selects the option to request a refund for the selected payment.
6. The System walks the Applicant through completing the required information for the refund request.
    a. The System shall allow specifying the type of transaction and transaction amount for which an automated refund can occur, including displaying which portions of the payment are eligible for refund (i.e. 10% not eligible due to cost-recovery of activities already performed, or application fee of $100 not eligible, but Inspection Fee of $50 is eligible, etc.) based on existing business rules

   b. The System shall provide the Applicant with a means to select individual, multiple, or all fee items eligible for refund.
   c. The System shall prompt the Applicant to indicate the reason for requesting a refund (both in a structured manner as well as by providing free text explanation)
7. The Applicant submits the refund request.
8. The System routes the request to a departmental Intake Staff for review.
   a. The System shall provide the capability to allow low complexity, low value refund requests to be automatically accepted and processed.
   b. The System shall support the enforcement of business rules according to the department associated with the payment
   c. The System shall provide the capability for refund requests to be queued in the System for designated personnel to review and process according to pre-defined business rules.

Associations to other Use Cases:

- Use Case: Issue a Refund

Alternative Flow:

- If a Customer requests a refund for a payment processed in person (see *Use Case: Process Payment Made in Person*). The Cashier may process a refund according to pre-defined business rules or may route the request through the business unit (see *Use Case: Issue a Refund*).

Additional Requirements:

- The System shall provide functionally to limit which payments are available for refund selection by the Applicant (i.e. The Applicant won't be able to select a "request a refund" option for an application where the project is nearly completed).
- The System shall provide customer service options to contact the City (i.e. online help, chat, email, call).
- The System shall require an e-signature or other certification by City staff, for designated transaction types (e.g., issuing a refund).
- The System shall have the capability to capture electronic signature

1.8.4 Use Case: Issue a Refund

Actor:

Departmental Supervisor

Purpose and Objectives:

This Use Case outlines the process for a Supervisor to review and process a refund requested online by an Applicant.

Trigger Events:

- The Applicant has submitted a refund request and the System has processed the request
- The System has routed the request to the Supervisor's queue

Precondition:

- The Applicant has requested a refund to a payment.

Post condition:

- The Supervisor has processed the refund request.

Use Case Flow

1. The Supervisor accesses his or her user account.
2. The Supervisor accesses his or her queue and views pending "Refund Requests"
    a. The System shall provide the capability to search, sort and filter the queue according to various criteria that suits the job function of the Supervisor, including but not limited to refund requests.
3. The Supervisor selects a request from the list and the System shall display the detailed Refund Request.
4. The Supervisor shall have the capability to research payment information in the System to support their review
    a. Supervisor is able to review application(s) status and workflow status and reasoning provided by Applicant
    b. Supervisor is able to capture internal notes related to their review of the request
    c. Supervisor shall have the ability to look up Applicant payment history including but not limited to past refund requests
5. The Supervisor completes the review and records the disposition, such as:
    a. Refund has been approved and can be issued
    b. Refund has been denied (including reason for denial)
    c. Additional information is required

    d. If the refund has been approved, the System shall issue the refund to the Applicant.

6. The System transmits any refund data to existing Systems (e.g., Finance System) required to process the refund
7. The System updates the status of the refund request and sends any pre-defined notifications to the Applicant
    a. The Applicant may also be able to access their account via the online portal to view the status of their request

Associations to other use cases:

- Use Case: Request a Refund

Alternative Flow:

- The City Employee may reject the refund request and submit the reasoning into the System, which could lead to an appeal-like process to be initiated by the Applicant.
- The Refund may be initiated by the Intake Staff (i.e., an Applicant mails in a fee for the wrong amount); The Intake Staff shall be able to capture and process the refund through the System.

Additional Requirements:

- The System shall provide the capability to integrate with the City's Financial System (SAP) to allow for funding account redistribution.
- The System shall allow the implementation of notifications to appear to the Applicant and/or City Employees (i.e., Intake Staff, Cashier) according to pre-defined business rules to reduce the risk of a future refund.
    - Example: An Applicant has received duplicate notifications of payment due (i.e., one notification received in person, another through the mail). If the Applicant attempts to pay for a payment twice, the System should alert the Applicant and/or Cashier that payment has already been received for that payment notice.
- The System shall have the capability to capture electronic signature

1.8.5 Use Case: Request Escrow Account

Actor:

- Applicant

Purpose and Objectives:

- This Use Case outlines the process for an Applicant to request an Escrow Account to manage payments for projects or other fees/expenses.

Trigger Events:

- Applicant desires to apply for an Escrow Account.

Precondition:

- Applicant has created a user account for the System.
- Applicant has not previously created an Escrow Account.

Post condition:

- Escrow Account has been setup for the user.

Use Case Flow:

1. The Applicant accesses the online portal and selects the option to request an Escrow Account.
2. The System shall display a template for the Applicant to enter his/her identifying information which includes but is not limited to the following:
   - First name
   - Last name
   - Mailing Address
   - Date of birth
   - Phone number(s)
   - Email address
   - Identification Number(s) (e.g., Drivers License)
   - Project role (if applicable)
   - Business information (if applicable)
   - The System allows the Applicant to deposit money into the account, via a variety of payment methods:
   - Bank Account
3. The System prompts the Applicant to designate authorized users of the account.
4. The System shall support various authorization requirements for additional users of the account, including but not limited to the following:
   - Signed letter from account owner
   - Identifying information for the authorized user (name, address, etc.)
   - Copies of identification and/or licenses
5. The Applicant provides the required information for the account.
6. The System shall perform any required validation of the payment options.
7. The System shall create the account and sends notification to the Applicant.

8. The Applicant receives notification that his or her account has been created and any instructions for using the account.
9. The System shall send the Applicant monthly statements and/or display the real time balance within the online portal for the user's account according to the communication preferences they have selected.

Alternate Flows:

- The System may be unable to validate the payment options provided by the Applicant and may require him or her to visit the DSD in person to set up the account.

Associations to other Use Cases

- Use Case: Request Online Portal User Account
- Use Case: Submit Payment Online
- Use Case: Record Payment Made in Person

1.9 General System Administration Use Cases

This set of Use Cases allows for the completion of systems administration tasks such as the application for and fulfillment of user accounts as well as the input and update of business rules that dictate workflows.

1.9.1 Use Case: Setup Internal (City Employee) User Account

Actor:

System Administrator

Purpose and Objectives:

Before any users can access the System, a user account will need to be set up. For City internal users, this includes ensuring that the user exists in a User Directory (such as Active Directory, Identity Management System or other). As part of that process, the System Administrator will validate a future user's identity, assign the proper access roles and create a user name and temporary password.

After setting up the users in the system, an automated message will be sent prompting the user to activate their account.

This Use Case assists a System Administrator to set up an internal user account in the System.

Trigger Events:

- The System Administrator is notified that a new user has requested access to the System.

Precondition:

- Prospective City user or client exists in the City's User Directory

Post condition:

- A user account has been set up and the user has been notified that the account can be activated.

Use Case Flow:

1. The System Administrator logs into the System and selects to create a new user.
    a. The System shall have the option to indicate the type of user to be set up (e.g. Customer, Plan Reviewer, Supervisor, Inspector, System Administrator).
    b. The System shall display a template for the System Administrator to search for the prospective user in the City's User Directory
2. The System Administrator identifies the prospective user and – depending on the type of user to be set up – displays a template for identifying a user's access rights.
    a. The System shall allow managing access rights and user profiles through predefined user profiles.

3. The System Administrator assigns a prospective user to a user profile and submits the profile.
    a. The System shall create a user profile for the new user.
    b. The System shall create a user name and temporary password.
    c. The System shall notify the new user that a user account has been set up and is ready to be activated.

Alternate Flows:

- If a City Employee has submitted a request for an account and the System Administrator was unable to perform the action, he or she may follow up by phone or other method to verify the identity.

Associations to other Use Cases

- All

Additional Requirements to this Use Case

- The System Administrator shall have the ability to delete or deactivate user accounts
- The System Administrator shall have the ability modify user accounts

1.9.2 Use Case: Manage Business Rules and Workflows

Actor:

System Administrator

Purpose and Objectives:

The solution will include significant number of business rules that enable the selection of Services, the routing of workflow and tracking of performance metrics along the Development Services Lifecycle. Since zoning code, services, metrics, etc. are subject to change, the Solution must support the managing of business rules through a Graphical User Interface (GUI) where a System Administrator can update and maintain business rules easily. This activity should not require in depth technical knowledge, and should be able to be performed by a business owner.

The City envisions that this will both allow for adding and removing business rules as well as managing any dependencies.

It is imperative that the solution have the flexibility to manage and maintain these business rules through the editing of reference tables or similar and that no specific IT skills are necessary to do so.

This use case describes how a System Administrator will maintain business rules in the system.

Trigger Events:

- A change in the business practice, City Ordinance, zoning code or similar requires a business rule to be changed.

Precondition:

- System Administrator is provisioned to manage business rules

Post Condition:

- The business rule in the system has been changed to reflect the change in business practice.

Use Case Flow:

1. The System Administrator logs into the System and selects to update business rules settings.
    a. The System shall display a list of all business rules the System Administrator is authorized to edit.
    b. The System shall allow the System Administrator to search, sort and filter business rules.
2. The System Administrator selects a business rule from the list and the System shall display detailed information on the business rule, such as:
    a. Description
    b. Related Processes
    c. Decision Trees
    d. Reference tables
    e. Upstream and downstream dependencies
    f. Outcomes
3. The System Administrator edits the business rules.
    a. The System shall allow the System Administrator to review and validate business rules.
    b. The System shall save all changes as well as a revision history with author, type, date and time of changes.
4. The System applies the changes to the business rule(s).

Alternate Flows:

- The System may prevent the change in business rules if it detects a potential compliance issue.

Associations to other Use Cases:

- All

Additional Requirements:

- The System shall provide best practice configurable workflow templates
- The System shall provide the ability to perform workflow management and approval hierarchies (e.g., approval paths based on item or document to be routed)
- The System shall provide the ability to create custom workflows based on business rules including the enforcement of workflow rules, with task checklists, to ensure processes are completed correctly and within specified timeframes
- The System shall provide the ability to incorporate "checklists" into the workflow process based on the transaction type and/or business process (e.g. plan review), including status notifications
- The System shall enforce a routing list definition that supports "if...then" logic
- The System shall provide the ability to workflow enable actions triggered by defined events including but not limited to application submittal, inspection assignment, inspection results, plan review assignment, plan review results, complaint submittal, financial transactions, etc.
- Ability to associate workflow roles to security/access business rules/roles

1.9.3 Use Case: Manage Fees and Distribution

Actor:

System Administrator

Purpose and Objectives:

The System will include significant number of business rules that enable the collection and distribution of fees associated with the development process. Since fees and the distribution of those fees will change over time (as frequently as yearly) a System Administrator will must have ability to update the business rules governing the fee and distribution structure. For example, an Applicant may complete and submit an application through the portal which requires a B Permit as well as a C Permit. The system will recognize what the fees are based on inputs from the user and then distribute those fees to all applicable accounts.

It is imperative that the solution have the flexibility to manage and maintain these fee and distribution structure through the editing of reference tables or fee grids and that no specific IT skills are necessary to do so.

This use case describes how a System Administrator will maintain fees and distributions in the system.

Trigger Events:

- A change in the business practice, City Ordinance, departmental business decision or similar requires a fee or distribution be changed.

Precondition:

- System Administrator is provisioned to manage fees and distributions.

Post Condition:

- The fee and/or distribution in the system have been updated to reflect the change.

Use Case Flow:

1. The System Administrator logs into the System and selects to manage fees.
    a. The System shall display a list of all departmental permits, services and associated fees the System Administrator is authorized to edit.
    b. The System shall allow the System Administrator to search, sort and filter permits, services and fees.
2. The System Administrator selects a permit, service or fee from the list and the System shall display detailed information on the business rule, such as:
    a. Description
    b. Department
    c. Fee amount
    d. Fee history
    e. Fee distribution information (departments, business units, account(s), etc.)
    f. Type of fee (Permit Service, etc.)
    g. Type of Fee change (Ordinance, business practice, etc.)
    h. Fee calculation (percentage or flat rate)
3. The System Administrator edits the fee amount and/or distribution.
    a. The System shall allow the System Administrator to review and validate fees and distributions.
    b. The System shall save all changes as well as a revision history with author, type, date and time of changes.
    c. The System shall notify department and designated City personnel (e.g., other system administrators, supervisors) that a change to fees or fee distributions has occurred and whom the author was.
4. The System enforces the changes to fees.

Alternate Flows:

- The System may prevent the change in business rules if it detects a potential compliance issue.

Associations to other Use Cases:

- All

Additional Requirements:

- The System shall support the change in fee being reflected on any documentation generated out of the System (e.g., renewal notices).

1.9.4 Use Case: Manage GIS Information

Actor:

- Primary: ITSD GIS Specialists ("IT/GIS Team")
- Secondary: Departmental City Land Development Staff ("LD Staff")

Purpose and Objectives:

The System will interface with the City's GIS Central Data Repository. The GIS/IT team is the owner of that data and makes any changes/updates to it. Those updates are passed to the System via an interface and DSD Staff would be responsible for updating any property records that couldn't be updated automatically (e.g., Attach a newly created GIS Address Point to a property record in the System).

The System will be able to validate information captured in the System against the City's GIS Central Data Repository, but GIS information will not be created directly in the System. The City's GIS Central Data Repository is the system of record for GIS data.

Trigger Events:

- An Applicant submits an application that affects GIS data and requires updates/changes to the data (e.g., Request for Rezoning)

Precondition:

- GIS data is maintained in the City's GIS Central Data Repository

Post Condition:

- The GIS data and affected record(s) in the System have been updated to reflect the change.

Use Case Flow:

1. The Applicant submits an application online that affects GIS data (see *Use Case: Submit Online Application*)
2. The application is processed
   a. See *Use Case: Review Application for Completeness*
   b. See *Use Case: Submit Online Payment*
   c. See *Use Case: Perform Technical Review of Land Development Application*
   d. See *Use Case: Document Staff Recommendation*
   e. See *Use Case: Conduct Review*

3. LD Staff captures the result of the review in the System as part of the *Conduct Review* process; LD Staff determines that the decision results in the required update/change of GIS data.
4. LD Staff notifies/coordinates with IT/GIS personnel to update the City's Central GIS Data Repository with the required changes.
5. IT/GIS Team updates the City's Central GIS Data Repository with the required changes, as appropriate.
6. An interface runs periodically (as determined by business rules and system configuration) to update the System with any new GIS data
7. The System is updated with the new GIS information via the interface
8. The affected record(s) are automatically updated with the new GIS information,
9. All changes are saved in the System

Alternate Flows:

- If the update cannot be performed automatically, LD Staff must associate the record with the new GIS data (e.g., Attach a newly created address to the property record)

Associations to other Use Cases:

- All

Additional Requirements:

- The System shall be able to verify that a City Parcel Key(s) , Bexar County Appraisal Parcel(s) ID, Addresses(s), legal description(s), lot(s), block(s), and NCB(s) once inserted into System is valid and exists through geo-validation/Arc Map GIS COSA Interface
- System application submittal process by the applicant to include the ability to capture the geometry, track, and map the geometry or shape file information.
- Establish what information is needed to create the geometry GIS to ask for specific information in the application
- Provide the ability to identify the geometry, attributes, and PDF document in a GIS spatial format automatically as information is inserted into System via a development application.
- Establish real-time communication between GIS and System, with the ability to generate custom map exhibits for DSD customers.

Figure 25. Manage GIS Data Process Flow Diagram