

CITY OF LOS ANGELES

**DEPARTMENT OF BUILDING AND
SAFETY**

**Artificial Intelligence (AI) Powered
Pre-Plan Check Assistant**

Scope of Work

July 2026

**201 North Figueroa Street
Los Angeles, CA 90012**

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SECTION 1: PURPOSE AND PROJECT DESCRIPTION

The City of Los Angeles Department of Building and Safety (LADBS) and Department of City Planning (City Planning) are seeking proposals from qualified Proposers to provide a vendor-hosted Artificial Intelligence (AI)-Powered Pre-Plan Check Assistant (“AIP PPC Assistant”).

In alignment with Executive Directive No. 19 (ED19), LADBS is soliciting proposals for an Artificial Intelligence (AI)-Powered Pre-Plan Check Assistant (AIP PPC Assistant) to facilitate development services and enhance the overall customer experience. The tool will be used by customers to validate their plans prior to submission.

The AIP PPC Assistant will streamline the development review process by accelerating workflows and optimizing submission quality. Specifically, the tool will be designed to:

- Validate overall application completeness and provide code compliance review.
- Identify required permit clearances from City departments that issue multi-family, residential, and commercial project clearances.
- Advise customers on the requirements and development review process based on project-specific needs.
- Provide staff-facing dashboards to track key performance indicators, including processing times and overall performance

1.1 Primary Objectives

The primary objectives of this AIP PPC Assistant include:

- Automating Pre-Plan Check completeness validation.
- Ensuring all required documentation is included in the permit application, including building plans and calculation sheets.
- Ensuring all forms are completely and accurately filled out.
- Enabling early identification of required City departmental reviews and clearances.
- Integration with existing City information and permitting systems.
- Providing advisory pre-screening of potential code compliance issues as described in **Section 2.1.1. (Core Regulatory Training)**.
- Reducing Plan Check correction cycles.
- Improving submission quality and permit processing timelines.
- Enhancing coordination across City departments involved in permit clearances.
- Supporting City staff through data analytics and performance insights.
- Implement Model Context Protocol (MCP) to provide a universal, standardized way for AI models to securely connect to external tools, databases, and data sources.

This project is aligned with the City’s modernization goals and [Executive Directive No. 19](#)¹ (ED19), which calls for the deployment of AI-enabled tools to improve development services efficiency, reduce processing delays, and enhance the overall customer experience.

The role of the AIP PPC Assistant will be advisory in nature. It must include necessary guardrails that maintain a “human in the loop.” City staff will maintain authority over all final determinations. The AIP PPC Assistant will neither perform Formal Plan Check review nor automatically issue permits.

1.2 Modes of Operation

The system shall provide three primary modes of operation:

1.2.1 Applicant-Facing Pre-Plan Check Mode

- Allows [Angeleno account](#) users to login and access a dashboard to submit applications and track their projects.
- Provide a dynamic application form that enables users to enter City defined data fields. These fields may incorporate AI assisted validation and verification capabilities such as, but not limited to, addresses, proposed project scope, intended use, and other application details.
- Generates a Universal Project ID Number² within the City’s BuildLA system.
- Performs automated completeness and pre-screening checks.
- Returns structured feedback prior to submission.
- Returns potential required clearances and provides guidance on which documents should be submitted with the application to obtain the necessary clearances.
- Provide instructions and feedback to customers for questions on obtaining permits, inspections, clearances, and other steps in the permitting process.

1.2.2 Staff-Facing Review and Analytics Mode

- Provides dashboards and reports of submitted and completed AIP PPC applications and plans. Metrics should include the number of submitted and completed AIP PPC applications, the number of identified errors, the number of identified clearances, the time to process, and the date/time of submission.

¹ The directive requires the development of a Request for Proposals (RFP) to seek a solution capable of validating application completeness and code compliance—including zoning, building codes, and local ordinances—before projects are formally filed. Furthermore, the mandate dictates that the RFP must address multi-departmental permit clearances for multi-family residential and commercial projects, evaluate the overall development review workflow, and include staff-facing dashboards to track comparative performance metrics.

² The Universal Project ID Number (sometimes referred to as the Unified Project ID) is a feature within the City of Los Angeles’ BuildLA initiative, designed to provide a single tracking number for development projects across multiple city agencies.

- Enables City staff to review and provide quality assurance for submitted AIP PPC applications.
- The system will support audit, oversight, and continuous improvement by allowing City staff to improve AIP PPC Assistant's behavior to better identify errors and required clearances.

1.2.3 Application Programming Interface (API)

- Provides a secure interface for existing City applications, including ePlanLA and future City systems, to integrate with the AIP PPC tool.
- The API shall accept permit application data, project metadata, supporting documents, and plan files as inputs.
- The API shall return structured results in JSON format, including identified issues, completeness findings, potential clearance requirements, confidence/score indicators, timestamps, and reference information used to support the results.
- The API shall support authentication, authorization, logging, error handling, and auditability for all transactions.
- The API shall allow City systems to retrieve the status and results of AIP PPC submissions, including pending, completed, failed, or resubmitted reviews.
- The API shall be designed to support future integration with City data sources, permitting systems, clearance systems, dashboards, and reporting tools.

SECTION 2: PROJECT REQUIREMENTS

2.1 Model Development and Training

The Contractor will be responsible for developing and maintaining a comprehensive regulatory and review workflow knowledgebases to power the AIP PPC Assistant's rule-based engine and automated pre-screening capabilities.

2.1.1 Core Regulatory Training

The system must be capable of ingesting, parsing, and structuring data from foundational City of Los Angeles, County, State, and Federal regulatory documents and data sources. The knowledgebase must incorporate:

- The Building Code (Chapter IX of the LAMC)
 - Relevant Departmental bulletins, manuals, and historical correction patterns
- The California Building Code Standards Code (Title 24) as locally amended
- The Original Zoning Code (Chapter I of the LAMC)
 - Implementation Memos, Information Bulletins, Interpretations, Overlays, Site-Specific Ordinances (Qs, Ts, & Ds), historical correction patterns, relevant approved planning entitlements, and other code-enabled documents
- The New Zoning Code (Chapter 1A of the LAMC)

- Public Notes, Overlays, historical correction patterns, relevant approved planning entitlements, and other code-enabled documents
- The [LADBS Clearance Summary Handbook](#) (and any successor documents)
- Data sources from City of Los Angeles and County of Los Angeles systems, including but not limited to relevant reference data such as address, parcel, APN, zoning, and other geographic information
- Other City Agency Chapters in the LAMC and other regulations
- Applicable State, County and Federal regulations

2.1.2 Rule Extraction and Logic Mapping

The system will translate textual code requirements into machine-readable, configurable logic. This involves mapping complex regulatory conditions, including but not limited to:

- Zoning and land use indicators, such as setbacks, height limits, use classifications, and regulations pertaining to other similar development standards.
- Basic Building Code triggers, including occupancy classification and construction type.
- Geographic and overlay considerations, such as fire zones and special design districts.

2.1.3 Core Review Workflow Training

The Contractor, with support from City staff, will be responsible for mapping and integrating standard City of Los Angeles project review workflows, sequences, and standard operating procedures (SOPs) into the AIP PPC Assistant's analytical engine. To accurately mirror the procedural logic of human reviewers and support guided, interactive application pathways, the system must ingest:

- **Standardized Correction Sheets**
Integration of common baseline correction lists across major disciplines (e.g., Zoning, Building, Structural, Green, and Fire) to establish a baseline for automated pre-screening.
- **Historical Pattern Analysis**
Ingestion of historical correction data to prioritize the detection of high-frequency submission errors, such as missing dimensions, incorrect occupancy classifications, improper setback calculations, or non-compliant signs.
- **Review Sequence Logic**
Rules governing the procedural order of operations, ensuring the AIP PPC Assistant evaluates foundational constraints (such as underlying zoning, use, and parcel conditions) before analyzing detailed architectural or structural components.
- **Modernization Alignment**
The underlying system and AIP PPC Assistant's architecture must be designed to support current and future integration with dynamic, guided application intake tools (e.g.,

conversational service navigators or interactive application interfaces) as part of the City's broader development services modernization efforts.

2.1.4 Plan Recognition and Model Tuning

The Contractor shall develop an AI model capable of analyzing building plans in standard formats (PDF, CAD, BIM) and identifying potential code violations based on the most current California Building Code Standards Code (Title 24) as locally amended, the Los Angeles Municipal Code including building, mechanical, electrical, plumbing, and zoning codes specific to the City of Los Angeles, and all City department clearances.

The AI model must be able to correctly identify and categorize code violations with a minimum accuracy of 90% for structural, electrical, plumbing, mechanical, fire safety, and zoning regulations.

The system must achieve a minimum accuracy of 90% in identifying and categorizing code violations across all covered disciplines. Accuracy must be validated prior to deployment through testing against plans with code violations, and must be continuously monitored against actual plan check outcomes following launch.

For every violation identified, the system must provide specific reference to the applicable code section and display findings with a clear distinction between passed, failed, and not applicable/not checked clauses/determinations.

The Contractor shall develop and implement a methodology for continuously improving the AI model based on user feedback, staff input and actual plan check results. Model performance evaluations will be conducted quarterly with findings reported to the City.

The Contractor must implement an agile code update process that maintains system accuracy as regulations change, with all code amendments incorporated within 30 days of publication. Additionally, the Contractor must maintain a versioning system that tracks which code version was applied to each analysis and provide users the ability to select specific code violations where appropriate.

The Contractor shall ensure the AIP PPC Assistant's system is adequately configured and tuned to accurately review, interpret, and extract data from complex project plans and supporting documents. This configuration must adhere to the data usage standards outlined in **Section 2.5 (Learning and Feedback)** and shall include:

- **Visual and Spatial Data Parsing**

The system must be trained to accurately interpret vector-based PDFs, Computer-Aided Design (CAD) formats, and Building Information Modeling (BIM) models. This includes the reliable extraction of text via Optical Character Recognition (OCR), reading title blocks, identifying drawing scales, and parsing complex tabular data (e.g., area calculations, sheet indices).

- **Contextual Feature Detection**

The AIP PPC Assistant model must be capable of recognizing and differentiating standard architectural, site plan, and construction detail elements. This includes identifying property lines, structural plans, architectural drawings, entry/exit paths, stairways, fire/life safety systems, accessible routes, restrooms, building footprints, setbacks, public right-of-way boundaries, driveways, parking layouts, trash/recycling areas, utility and infrastructure connections, and proposed or existing signs.

- **City-Specified Document Classification**

The system must be trained to recognize and validate standard City forms, applications, and inter-departmental clearance documents to accurately assess submission completeness.

- **Iterative Accuracy Refinement**

The Contractor shall provide a mechanism for City staff to review AIP PPC generated findings and flag inaccurate responses or missed detections. This feedback loop must allow for the localized tuning of the AIP PPC Assistant's engine to improve the system's accuracy over time, subject to City of Los Angeles review and approval of any model updates.

2.1.5 Inter-Departmental Clearance Logic

The Contractor is responsible for developing a knowledgebase that accurately maps the rules required to identify potential clearances from LADBS, City Planning, Los Angeles Fire Department (LAFD), Bureau of Engineering (BOE), Los Angeles Department of Water and Power (LADWP) and other City agencies participating in the review process. This logic must dynamically evaluate details of the permit application including project type, parcel data, and zoning overlays to trigger the appropriate advisory warnings. This logic shall also suggest which documents are needed to obtain clearances as part of the submission completeness validation described in Section 2.2.

2.1.6 Versioning and Ongoing Maintenance

To ensure long-term viability, the knowledgebase architecture must support continuous updates, version control, and modular amendments. As the City adopts new laws and ordinances, updates clearance requirements, or implements zoning changes, the system must allow for the seamless integration of these updates without requiring Contractor or vendor code changes or disrupting the underlying application architecture. Furthermore, when new Federal or State laws that override local City ordinances are adopted, the system will support the integration of these new laws. For example, the system could identify required parking for a project, but then flag that it is subject to a related piece of legislation, such as AB 2097.

2.2 Functional Requirements

2.2.1 Project Initiation and Intake

Prior to uploading project files and analysis, the system shall establish a verified project record by executing the following initiation sequence:

- **Identity Authentication**

Require applicants to authenticate their session by signing in using the City's Angeleno Account system, similar to the **ePlanLA** (<https://eplanla.lacity.org/>) system sign in method, to ensure secure, standardized access.

- **Project and Document Management**

The system shall allow users to upload plans and supporting documents in approved file formats. The uploaded files shall be validated for format, size, and virus/security compliance. The system shall maintain a version history and timestamps for submitted documents.

- **Dynamic Application Forms**

The system shall provide dynamic application forms containing City defined data fields. The system shall display and hide application fields based on project scope, user selections, and workflow rules.

- **AI Validation and Verification**

The system shall perform AI-assisted validation of entered application data. The system will validate addresses against City records and GIS databases (such as NavigateLA, ZIMAS, or the Unified Street Address Guide). The system shall evaluate proposed project scope and intended use for completeness and code compliance. The system shall identify missing, inconsistent, or incorrect application data prior to submission.

- **City System Integration**

The system shall integrate with existing City systems to verify property and parcel information, property zoning, and other applicable zoning and building code restrictions.

- **Universal Project ID Generation**

Interface with the City's BuildLA ecosystem via secure API to generate and assign a Universal Project ID Number. The system must be able to identify if customers used the Pre-Plan Check session. This identifier shall be included in all uploaded project files, and the final compliance report, ensuring seamless continuity when the applicant transitions to a Formal Plan Check.

2.2.2 Submission Completeness Validation

The system shall:

- Identify missing required documents, sheets, calculations, or plan components.
- Validate basic plan organization (sheet naming, indexing, discipline grouping).
- Detect common submission issues (illegible text, missing scales, etc.).

- Recommend project plan sheet organization revisions that will help City staff review a proposed project more efficiently during Formal Plan Check.
- The system shall not prevent users from submitting applications, but shall provide guidance to improve submission quality.
- The system will provide a submission readiness score to indicate the overall quality of submission.
- Confirm that the permit type was selected correctly.
- Provide notification to applicants of Submission Readiness Status, such as:
 - Ready for Submission
 - Requires Attention
 - Incomplete

2.2.3 Rule-Based Pre-Screening

The system shall apply configurable rule-based logic, as outlined in Section 2.1, as the primary mechanism with AI-assisted analysis used to enhance detection and interpretation of plan content. The rule-based engine shall be configurable by City of Los Angeles staff, without requiring Contractor or vendor code changes.

The system shall identify potential issues, including but not limited to:

- Zoning and land use indicators (e.g., setbacks, height limits, use classifications)
- Basic Building Code triggers (e.g., occupancy classification, construction type indicators)
- Accessibility indicators (ADA/CBC)
- Fire zone, overlay, and geographic considerations
- Common plan check issues based on City of Los Angeles defined rules and historical patterns

2.2.4 Findings and Output Requirements

All findings shall:

- Be clearly categorized using standardized severity levels:
 - Blocking (likely to prevent submission or approval).
 - Warning (potential compliance concern).
 - Informational (advisory or best practice).
- Include relevant code references (including links whenever possible), as established in **Section 2.1.1. (Core Regulatory Training)**, where applicable
- Provide clear explanations of the triggering condition, including:
 - The rule or condition that generated the flag.
 - Any assumptions made by the system.
 - Provide prospective applicants the ability to notify City staff of any inaccurate flag or assumptions made by the system.
- Be presented through:
 - Visual overlays on plan documents (where applicable).
 - Textual explanations in user-friendly language.

- Include confidence indicators for AIP PPC Assistant's findings
 - **Zoning Setback Violation:** "The proposed front yard setback appears to be 10 feet, but the Original Zoning Code requires 15 feet." → **Confidence: High (98%)**
 - The AI clearly read the dimension lines on the CAD file.
 - **Missing Clearance:** "This project may require a clearance from the Bureau of Engineering for public right-of-way improvements." → **Confidence: Medium (65%)**
 - The AI detected keywords related to street work in the project description, but lacks the visual certainty from the site plan.

2.2.5 Clearance Identification

The system shall identify and return potential required departmental clearances based on project scope, location, and attributes, including multi-family residential and commercial projects (priority project types under Executive Directive 19). Attributes may include but are not limited to the following:

- Project type
- Project scope
- Parcel data
- Zoning data
- Applicable overlays and conditions of approval, including prior entitlements

The system shall:

- Use a configurable, rule-based engine as the primary method for identifying necessary clearances.
- Allow AI-assisted detection of relevant project features.
- Recognize and identify clearances issued by the City Planning, LAFD, BOE, Bureau of Sanitation (BOS), Bureau of Street Services (BSS), Bureau of Contract Administration (BCA), Los Angeles Housing Department (LAHD), LADWP, Department of Transportation (DOT), and other City agencies that issue clearances.
- Reference the [LADBS Clearance Summary Handbook](#) (and successor documents) as the authoritative source for clearance scope, purpose, and applicability.
- Enable City staff to review and provide quality assurance for identified clearances. The system will support audit, oversight, and continuous improvement by allowing City staff to improve AIP PPC Assistant's behavior to better identify required clearances.
- Provide:
 - List of likely required clearances.
 - Locations, links, and helpful information for obtaining clearances
 - Confidence levels.
 - Triggering conditions, explanations for why clearances are being required.
 - List of submittal requirements that must be included in the application in order to obtain the necessary clearances.

The system must clearly state that final clearance determination is subject to official City staff review.

See below for potential screenshots of the presentation of the AIP PPC Assistant information.

PIN 186B097 329

22557 W COVELLO ST 91307

ZONING
RS-1PERMIT (PCIS)
260162000013133EPLAN APP ID
298432COUNCIL DISTRICT
12COMMUNITY PLAN
Canoga Park-West Hills-
Winnetka-Woodland HillsAREA PLANNING COMM.
South ValleyCENSUS TRACT
1343.03ENGINEERING DISTRICT
VNLOT
25

TOTAL CLEARANCES

9

CRITICAL

4

STANDARD

2

INFORMATIONAL

3

OVERLAY ADVISORIES

8

PCIS Clearances

Overlay Advisories

Parcel Attributes

All (9)

Critical (4)

Standard (2)

Informational (3)

Filter by department / clearance...

ENG Bureau of Engineering

3 clearances

☒ Sewer availability

Bureau of Engineering (ENG)

Critical score 0.98

Action: Sewer availability and connection

- ML model probability 0.97 (rule score was 0.00)

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

☒ Eng Process Fee Ord 176,300

Bureau of Engineering (ENG)

Critical score 0.97

Action: The fee authorized by Ord. 176,300 for PW/Eng to process clearance(s) for LADBS issued permits

- BOE process fee on alterations
- ML model probability 0.97 (rule score was 0.65)

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

☐ Watercourse

Bureau of Engineering (ENG)

Informational score 0.63

Action: Construction within natural watercourse

- ML model probability 0.63 (rule score was 0.00)

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

BAS Department of Building & Safety

3 clearances

☒ Miscellaneous

Department of Building & Safety (BAS)

Critical score 0.89

Action: Miscellaneous approval for: "Soft story retrofit requirement - Pls Contact soft.storyretrofit@lacity.org"; "soft story"; "JADU AFFIDAVIT"

- ML model probability 0.89 (rule score was 0.00)

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

☐ Zoning Clearance

Department of Building & Safety (BAS)

Critical score 0.55 GIS-confirmed

Action: Approval for pumpkin patch and Christmas tree lot

- GIS overlay intersects parcel: BASB
- New construction / addition

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

☐ Hold

Department of Building & Safety (BAS)

Standard score 0.68

Action: Hold applied to application - contact Bldg. & Safety for details

- ML model probability 0.68 (rule score was 0.00)

Applies to: Bldg-Alter/Repair/1 or 2 Family Dwelling

DWP Department of Water & Power

2 clearances

PLN City Planning

1 clearance

PCIS Clearances	Overlay Advisories	Parcel Attributes
Standard (2)		
Within Baseline Mansionization / Hillside Ordinance area City Planning – Baseline Mansionization BMO / BHO size, encroachment-plane and lot-coverage limits apply. Confirm RFA and FAR computations. <i>Applies to: New construction and additions on R-zoned lots</i>		Standard LAMC 12.21 / 12.21.1
Zoning: RS-1 City Planning – Zoning Compliance Verify proposed use, height, FAR, setbacks, parking and landscape requirements comply with the assigned zoning. <i>Applies to: All permit types</i>		Standard
Informational (6)		
Area Planning Commission: South Valley City Planning – Area Planning Commission Discretionary actions on this parcel are heard by the assigned Area Planning Commission. <i>Applies to: Projects requiring discretionary approval</i>		Informational
Community Plan Area: Canoga Park-West Hills-Winnetka-Woodland Hills City Planning – Community Plan Area Confirm consistency with adopted community plan land-use designation and any community-plan-specific policies. <i>Applies to: All permit types</i>		Informational
Neighborhood Stabilization Zone: 12.3 City Planning – Neighborhood Stabilization Subject to neighborhood stabilization regulations. Demolition and conversion of multifamily housing may be restricted. <i>Applies to: Demolition, conversion of residential units</i>		Informational
Council District 12 — WEST HILLS NC Council District Office Council office notification may be required for projects requiring public hearing. Some CDs have supplemental review (e.g., Neighborhood Council review). <i>Applies to: Projects requiring discretionary approval</i>		Informational
Enterprise Zone: 9 Economic Development – Enterprise Zone Property is within a designated Enterprise Zone. Tax credits and fee reductions may be available. <i>Applies to: New business, tenant improvement, expansion</i>		Informational
LADBS Branch: VN LADBS – Branch Office Plan check and inspections handled by the assigned LADBS branch office. <i>Applies to: All permit types</i>		Informational

2.2.6 Plan Analysis Capabilities

The system shall support:

- Vector-based PDFs.
- CAD formats (including files in DXF format).
- BIM models.
- Word Process formats (DOCX).

Initial focus shall prioritize:

- Document structure.
- Text extraction.
- Basic geometric recognition.

2.2.7 Issue Presentation and Explainability

The system shall:

- Provide visual overlays on plans highlighting flagged issues.
- Include clear and actionable textual explanations.
 - City staff can provide standardized review comments as a content and formatting resource.
- Reference applicable codes or rules where possible.
- Generate user-friendly recommendations for correction.

2.2.8 Compliance Report Generation

The system shall generate a structured report that identifies:

- Submission readiness status.
- List of identified issues.
- Likely required clearances.
- Supporting explanations and references.
- Actionable “next steps” guidance.

Reports must be exportable (PDF or equivalent) using native, in-system functionality.

2.2.9 Disclaimers and User Guidance

The system shall prominently display that:

- Results are advisory only.
- The tool does not constitute Formal Plan Check approval.
- Final determinations are made by the City of Los Angeles staff.

2.2.10 Performance and User Experience

The system shall:

- Operate and provide results within defined timeframes, subject to City of Los Angeles review and approval, including maximum processing times for standard and complex submissions.
 - For example, the system shall return a result within 30 minutes or less for 90% of projects.
- Display real-time status indicators.
- Provide performance logs accessible to City of Los Angeles staff for monitoring and validation of system responsiveness.

- Be compliant with the Americans with Disabilities Act (ADA) in accordance with the most recent [Web Content Accessibility Guidelines](#) (WCAG) standards.

2.2.11 User Interface

The Contractor shall develop an intuitive, web-based user interface that allows users to select desired permit types, provide permit related information including location, upload building plans and associated supporting documents, initiate Pre-Plan Check reviews, view compliance results, and download detailed reports in PDF format. The interface must be compatible with all major browsers and responsive across various device types.

The interface shall allow users to:

- Authenticate through the City's Angeleno account system via Auth.0 for external users, and through the City's Single Sign On System using Okta Workforce Identity Management (IDM) for City of Los Angeles employees as appropriate with role-based access controls that distinguish internal and external user permissions.
- Identify and select a specific parcel within the platform, or receive parcel data as a pass variable, prior to initiating a compliance review.
- Upload plans and supporting documents in acceptable formats including PDF, DOCX, Drawing Exchange Format (DXF), CAD, and BIM with all files passing an automated security scan prior to AI integration.
- Initiate Pre-Plan Check screening processes to generate compliance reports.
- View a compliance summary with clear indicators for passed, failed, and other determinations accompanied by a list of recommended corrections with citations to applicable code sections based on historical correction patterns.
- Access a detailed breakdown of findings by compliance category, with the ability to show and hide the full list of code sections to focus on relevant results.
- View clear visualizations of potential code violations, including the ability to highlight problematic areas directly on uploaded plan documents.
- Download a comprehensive PDF report of compliance check results suitable for use by all applicants.
- Access to user dashboard that displays submission history and supports comparison between different versions of submitted plans.
- Navigate back to view results for other buildings or properties associated with the same account, as applicable.
- The interface must comply with ADA accessibility requirements and conform to WCAG standards.

2.2.12 Analytics and Performance Metrics

The system shall capture and retain sufficient operational and usage data to allow the City of Los Angeles to measure the impact of the AIP PPC Assistant on permitting efficiency, submission quality, and overall processing timelines.

The system shall provide the data, logs, and export/API capabilities necessary for the City of Los Angeles to develop reporting and analytics using City data platforms including PowerBI and SAP.

The system shall support tracking and analysis of different intake pathways, including:

- Standard ePlanLA (<https://eplanla.lacity.org/>) submission workflows.
- AIP PPC Assistant submission workflows.

The system shall capture key performance indicator (KPI) data necessary to evaluate:

- Whether a submission used the AIP PPC Assistant.
- Date/time of initial upload or interaction.
- Date/time AIP PPC Assistant review was completed.
- Submission readiness status or score.
- Issues identified prior to formal submission.
- Likely required clearances identified.
- Whether the user proceeded to formal ePlanLA submission.
- Linkage between the AIP PPC Assistant's record and downstream permitting records, where available.
- Usage metrics and adoption rates.

The system shall provide secure access to underlying tracking data through APIs, exports, logs, or other City of Los Angeles approved methods.

These tracking capabilities shall allow the City of Los Angeles to evaluate whether AIP PPC Assistant improves submission quality, reduces correction cycles, reduces resubmittals, and shortens overall permitting timelines compared to non-AIP PPC-assisted submissions.

This KPI data shall support City of Los Angeles reporting requirements and Executive Directive 19 performance tracking.

2.2.13 Learning and Feedback

The system may support continuous improvement through:

- Reviewer feedback inputs.
- Audit results.
- Controlled model updates.
- Project correction sheets, templates, and similar documents/databases.
- Automated monthly updates of reference information, including but not limited to address, parcel, APN, zoning, and other attribute data significant to plan check and clearance assessment.

Restrictions:

- No use of City of Los Angeles data without explicit written approval.

- All learning processes must be transparent and auditable.
- Any model updates shall be subject to City of Los Angeles review and approval

2.2.14 Integration Requirements

The system shall be delivered as a stand alone web application that integrates into existing City platforms and Infrastructure. The Contractor shall ensure seamless integration with existing City systems through standard APIs, including:

- **ePlanLA** - The City's existing web based electronic plan submission and review platform, through standardized bidirectional APIs that allow information from a customer submission in ePlanLA to be sent to the AIP PPC system. The AIP PPC system would return results via the API. Additionally, Pre-Plan Check screenings could be carried forward into official submissions in ePlanLA without duplicative data entry.
- The **Los Angeles City Permitting System (LACPS)** - a new system currently being developed in LADBS on the Salesforce and Clariti platforms. The Contractor must design an integration architecture that accommodates the system and must coordinate directly with LADBS and its development partners throughout the build to ensure compatibility as that system is completed and deployed.
- The **Angeleno account and City Single Sign-On** systems - provide a seamless user experience across LADBS digital services.

The Contractor shall implement a method to track plans that have been previously screened through the preplan system when they are subsequently submitted for official plan check review, allowing the City to measure correction cycle reduction rates and overall system effectiveness. All APIs developed must be documented, versioned, and conform to the City of Los Angeles data exchange standards. The Contractor will coordinate with City staff throughout the integration and must conduct integration testing with all relevant City systems prior to each phase of the development. The Contractor must provide metrics on improvement rates and reduction in correction cycles.

The system shall:

- Operate as a standalone web application
- Support integration with a unified, customer-facing web experience hosted on a City of Los Angeles website, enabling a seamless transition from the AIP PPC system to a Formal Plan Check submission, including integration with ePlanLA and future systems
- Establish a secure API that will allow City of Los Angeles agencies to incorporate the AIP PPC Assistant's capabilities into their own web-services and departmental intake portals
- Provide secure APIs for integration with:
 - City of Los Angeles permitting systems.
 - ePlanLA/electronic document systems.
 - Future Los Angeles City Permitting System (LACPS) platform.
 - City Planning's Zone Information and Map Access System (ZIMAS).
 - Other successor systems.

APIs must support:

- Direct submission of project files.
 - Securely accept project file uploads and file transfers directly from external City applications to initiate the AIP PPC Assistant process remotely.
- Asynchronous Processing and Webhooks.
 - Support asynchronous requests and utilize webhooks or event-driven callbacks to notify the originating City portal when the AI analysis is complete, ensuring a smooth user experience.
- Submission status tracking.
- Result retrieval.
- Audit logs and overrides.
- Headless execution of the pre-screening engine to allow external City applications to run checks in the background.

2.2.15 Authentication

The system shall support secure, role-based access control by requiring:

- External users to authenticate via the City's Angelino Account platform / Auth0.
- Internal City staff users authenticate via the City's Single Sign-On environment using Okta Workforce Identity Management.

SECTION 3: CONTRACTOR RESPONSIBILITIES

The selected Contractor shall:

- Provide a secure, Contractor or vendor hosted solution branded for the City of Los Angeles.
- Provide a dedicated Project Manager and conduct regular coordination meetings with City of Los Angeles staff and relevant stakeholders.
 - The Project Manager shall act as the primary point of contact for all coordination with the City. The Project Manager will be responsible for all project management activities, including but not limited to managing and complying with project schedule, identification and mitigation of risk items, issue escalation, lifecycle management, and system monitoring.
- Conduct weekly status meetings with City stakeholders to provide updates on project progress, active risks and upcoming milestones.
- Maintain and provide the City with current contact information, including telephone numbers and email addresses for each level of escalation and must notify LADBS promptly of any changes to that information.
 - The City will designate staff with authority to approve system upgrades, updates and deployments, and will supply corresponding contact information to the Contractor.
- Support implementation, configuration, testing, and deployment of the system.

- Provide environment-specific deployments, including:
 - Sandbox.
 - User Acceptance Testing (UAT).
 - Production.
- Describe how the proposed solution supports the phased implementation outlined in **Section 6 (Phased Implementation Approach)**, including expansion to internal City of Los Angeles workflows and Formal Plan Check assistance and system integration.
- Provide a comprehensive training and knowledge transfer plan, including:
 - Administrator training.
 - End-user training.
 - “Train-the-trainer” materials.
 - User guides and reference documentation.
- Collaborate with City of Los Angeles staff on:
 - System validation and accuracy.
 - Quality Assurance (QA) and testing activities.
 - Audit response and issue resolution.
- Provide post-implementation support options, including:
 - A defined hyper-care period following deployment.
 - Ongoing maintenance and support options.
- Develop and maintain secure APIs to support integration with LADBS, City Planning, and other City agency systems as outlined in **Section 2.6 (Integration Requirements)**.
- Comply with City data governance, retention, and audit requirements.
- Deliver the following documentation and materials:
 - User documentation (administrative and end-user).
 - API documentation and integration specifications.
 - System architecture overview.
 - Model governance and retraining policies.
 - Security and access control documentation.

SECTION 4: LEGAL, SECURITY, AND COMPLIANCE

The proposed solution shall align with the City’s [AI Roadmap](#) and comply with the requirements of the City’s [AI Safety Checklist](#) as follows:

4.1 Legal and Ethical Compliance

4.1.1 Compliance with Legal and Ethical Standards

- The proposed solution shall comply with the values and recommendations of the [City of Los Angeles Digital Code of Ethics](#).
- The proposed solution shall comply with all relevant laws and regulations, including but not limited to those related to data protection, retention, privacy, and anti-discrimination.

4.1.2 Bias Mitigation and Accessibility

- The proposed solution must ensure that demographic biases (e.g., race, gender, socioeconomic status, etc.) are not reflected in the AI's decisions.
- The proposed solution shall include periodic audits of the models used to identify, report and mitigate any biases that may emerge after implementation.
- The proposed solution shall include fairness checks for each significant demographic group to ensure consistent, equitable outcomes prior to launch, and periodically thereafter to identify, report, and mitigate any biases that may emerge after implementation.
- The proposed solution shall meet accessibility standards for its expected user base, including the most recent WCAG, and shall be periodically reviewed to ensure continued compliance with evolving best practices.

4.1.3 Human Oversight

- The proposed solution shall integrate Human-in-the-Loop mechanisms.
- The proposed solution shall clearly define the responsibilities of human supervisors to override or adjust AI decisions when necessary.

4.2 Transparency and Explainability Requirements

4.2.1 Algorithm Transparency

- The proposed solution shall have documented its decision-making processes to ensure the City understands the logic behind decisions.

4.2.2 Data Transparency

- The proposed solution shall disclose the source data used to train the AIP PPC Assistant, specifying whether it comes from public datasets, proprietary sources, or is collected by any other means.
- The proposed solution shall provide an easy-to-understand data privacy policy that informs users about how their data is collected, stored, and used by the AI model (if at all).

4.2.3 User Notifications

- The proposed solution shall inform City residents, visitors, businesses, partner agencies, or other external stakeholders when they are interacting with an AI system.
- The proposed solution shall provide City residents, visitors, businesses, partner agencies, or other external stakeholders with alternative contact information if the users prefer to interact directly with City staff.

4.3 Human-Centric Design Requirements

- The proposed solution will be assessed for how it enhances human decision-making without undermining human judgment, through some form of community engagement (e.g. focus group, survey, etc) to ensure public feedback is solicited.

- The proposed solution will need to be designed to ensure that human operators retain the ability to override the AI in exceptional cases.
- The proposed solution will need to be designed to augment human capabilities and expertise, not replace them.
- The proposed solution must include documentation for use and training for the employees maintaining and deploying the system.

4.4 Security and Data Privacy Requirements

4.4.1 Data Security Measures

- The proposed solution and its underlying infrastructure, shall adhere to the [City's Information Technology Security Policy](#), including applicable data encryption and anonymization requirements and cybersecurity safeguards based on the type of AI system and data accessed.
- The proposed solution shall provide regular updates and patches necessary to address potential vulnerabilities, especially if it handles sensitive data.
- The proposed solution shall implement security protections, applying strong technical mitigations, where possible, to enforce the other items in this Section (Section 4 - Legal, Security, and Compliance).
- The proposed solution shall adhere to principles of data minimization such that it only collects or uses personally identifiable information when absolutely necessary, only for the intended purposes, and only retains that data for so long as necessary to fulfill the purposes for which it was collected or as required by law. This applies throughout the AI tool's architecture, from the amount of data it accesses, to data shared with its servers, to data that might be shared with third parties.

4.4.2 Robustness Against Cyber Attacks

- The proposed solution shall be included in the Cyber Watch List for frequent vulnerability scans.

4.4.3 Other Security Requirements

- The proposed solution ensures that data is encrypted both at rest and in transit with the latest encryption technology.
- The proposed solution implements strict access controls to prevent unauthorized access, such as applying zero trust methodology and implementing role based access control.
- The proposed solutions shall include regular backups and disaster recovery capabilities.
- The proposed solution shall use U.S. based data hosting.

4.5 Compliance with the Americans With Disabilities Act

This AI tool must be designed and developed to be accessible to individuals with disabilities, adhering to the standards and guidelines outlined in the ADA and most recent WCAG standards to the extent applicable to the tool's interface and output. This includes but is not limited to the following:

- **Keyboard Navigation:** All functionalities of the tool, including uploading plans, initiating analysis, reviewing results, providing feedback, and generating reports, shall be fully operable via keyboard input without requiring a mouse.
- **Sufficient Time:** The tool shall provide users with sufficient time to read and use content. Adjustable time limits or the ability to extend time limits should be provided where applicable.
- **Seizures and Physical Reactions:** The tool shall not contain any content that is known to cause seizures or physical reactions.
- **Navigable:** The user interface shall be designed to allow users to easily navigate through different sections and functionalities. Clear headings, labels, and logical focus order are required.
- **Readable:** Text content within the user interface and in generated reports shall be readable and understandable. Clear and concise language should be used.
- **Predictable:** The operation and functionality of the tool should be predictable to the user. Consistent design patterns and clear instructions should be employed.
- **Input Assistance:** If the tool requires user input, clear instructions and error messages should be provided to assist users in providing correct information.
- **Compatibility with Assistive Technologies:** The tool shall be compatible with a wide range of assistive technologies, including screen readers, screen magnifiers, speech recognition software, and alternative input devices. The output and interface elements should be structured in a way that allows these technologies to accurately interpret and present information to users.

SECTION 5: MINIMUM TASKS AND DELIVERABLES

Proposers must include, at a minimum, the criteria of each deliverable described below. However, Proposers are encouraged to provide a response that elaborates on each deliverable and details how it coincides with their overall proposed solution. Acceptance criteria is required for each proposed deliverable.

If a Proposer does not agree to provide a given deliverable, the Proposer must provide an explanation for consideration using Exhibit 6 - Additional Information page 1 - Omissions, Deviations, and Alternatives.

The Proposer may add additional deliverables to the list provided below. Any additional deliverables added by the Proposer shall be clearly identified in Exhibit 6 - Additional Information page 3 - Additional Data the Proposer Wishes to Present.

Task	Deliverables
1. Project Management	1.1 - Project Charter 1.2 - Project Schedule

	1.3 - Requirements Traceability Matrix (RTM) 1.4 - Project Management Plan (PMP) 1.5 - Knowledge Transfer Strategy and Project Team Training Plan 1.6 - Train-the-Trainer and End-user Training Strategy 1.7 - Weekly Project Status Reports 1.8 - Configured Hardware Environments (sandbox and development) and Documentation
2. Requirements Validation	2.1 - Requirements Fit Gap Analysis 2.2 - Validated Functional and Technical Requirements 2.3 - Business Intelligence Plan 2.4 - System Landscape Architecture 2.5 - Technical Deployment Strategy
3. Design, Development and Configuration of the AI Model	3.1 - Detailed Functional and Technical Specifications 3.2 - Technical Design Document 3.3 - Web Portal Design Document
4. Security	4.1 - Security Plan 4.2 - Role-to-Position Mapping
5. System Integration	5.1 - Systems Integration Strategy 5.2 - Technical Specification Document (for each Interface)
6. Testing	6.1 - Test Plan 6.2 - Test Scripts, Test Cases, and Test Data 6.3 - Configured Hardware Environments Documentation (testing) 6.4 - Testing Report
7. Knowledge Transfer and Training	7.1 - Training Curriculum Document 7.2 - Train-the-Trainer and End User Training Materials 7.3 - Technical Documentation
8. System Deployment and Rollout	8.1 - Final Detailed Deployment Plan 8.2 - Rollback Strategy and Plan 8.3 - Configured Hardware Environments Documentation (production) 8.4 - Go/No-Go Documentation 8.5 - Production Support Plan 8.6 - Deployment of AIP PPC engine and API 8.7 - Deployment of AIP PPC portal
9. Production Support and Transition	9.1 - Successful Deployment Documentation 9.2 - Phase Closeout 9.3 - Acceptance and Final Acceptance Plan and Schedule 9.4 - Maintenance and Support Monthly Report 9.5 - Comparative metrics for baseline vs post-implementation performance

SECTION 6: PHASED IMPLEMENTATION APPROACH

The proposed solution shall support a phased implementation strategy, beginning with Pre-Plan Check functionality and expanding into Formal Plan Check assistance including Clearance identification and system integration.

The system architecture shall be designed to support scalability and future expansion without requiring significant re-platforming.

6.1 Pre-Plan Check Assistant (Phase 1)

Initial deployment shall focus on applicant-facing Pre-Plan Check capabilities to improve submission quality, identify required clearances faster, and reduce correction cycles.

Scope shall include:

- AI knowledgebase development.
- Completeness validation.
- Rule-based and AI-assisted pre-screening.
- Clearance identification (advisory, rules-based).
- Compliance reporting and submission readiness indicators.
- Analytics and dashboards aligned with ED19 performance tracking.
- Support for plan formats including PDF, CAD, DXF, BIM and DOCX.

6.2 Internal AI Assistance and LACPS Integration (Phase 2)

The system shall support expansion into staff-facing tools and system integration, including:

- Formal Plan Check assistant capabilities for City of Los Angeles staff
- Staff interface for reviewing AI-generated findings
- Integration with LACPS and related systems
- Support for project review workflows, issue tracking, and corrections
- Continued use of AI to assist, but not replace, City of Los Angeles Formal Plan Check decision-making