



## CLASSIFICATION STANDARD

### **ARCHITECTURE AND TOWN PLANNING**

### **SCIENTIFIC AND PROFESSIONAL CATEGORY**

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### **SCIENTIFIC AND PROFESSIONAL CATEGORY**

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Classification Standard

Architecture and Town Planning

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## INTRODUCTION

This standard describes the classification plan used to determine the relative difficulty of positions allocated to the Architecture and Town Planning Group. It consists of an introduction, definitions of the Scientific and Professional Category and the Architecture and Town Planning Group, a glossary of terms, level descriptions, and bench-mark position descriptions.

The level description method is used to classify positions allocated to the Architecture and Town Planning Group. Each of the 7 levels in the classification plan is described in terms of the primary features used to assign jobs to the level. Positions are regarded as being of equal difficulty and are assigned to the same level when the duties and responsibilities best correspond, on the whole, with the description of that level and the bench-mark position descriptions that exemplify the level.

### Bench-mark Positions

Bench-mark position descriptions exemplify each level. Each description consists of a statement of the duties and the distinguishing features of the position. The bench-mark position descriptions are an integral part of the plan and are used to ensure consistency in applying the level descriptions.

### Use of the Standard

Four steps are to be followed in applying this classification standard:

1. the position description is studied to ensure understanding of the position as a whole. The relation of the position being evaluated to positions above and below it in the organization is also studied;
2. the allocation of the position to the category and group is confirmed by reference to the definitions and the descriptions of inclusions and exclusions;
3. the position is tentatively assigned to a level by comparing the duties and responsibilities of the position with the level descriptions. The position is tentatively assigned to that level that best corresponds on the whole with the duties and responsibilities of the position;
4. the description of the position being evaluated is compared with the descriptions of the bench-mark positions illustrating the level tentatively selected, and comparisons are also made with the descriptions of bench-mark positions for the levels above and below the level tentatively selected, as a check on the validity of the level selected.

Some particularly specialized positions may not entirely correspond to the description of the level or bench-mark position, owing to specific and authorized responsibilities and requirements in the organization.

CATEGORY DEFINITION

Occupational categories were repealed by the Public Service Reform Act (PSRA), effective April 1, 1993. Therefore, the occupational category definitions have been deleted from the classification standards.

#### GROUP DEFINITION

For occupational group allocation, it is recommended that you use the [Occupational Group Definition Maps](#), which provide the 2005 group definition and their corresponding inclusion and exclusion statements. The maps explicitly link the relevant parts of the overall 2005 occupational group definition to each classification standard.

GLOSSARY OF TERMS

The group definition, level determinants and bench-mark position descriptions include certain terms which have specific meanings and raters are to refer to the glossary to ensure consistency of understanding in the use of these terms:

## 1. Planning

- the study and correlation of data and the development of comprehensive proposals and criteria for the utilization of land and physical facilities.

## 2. Urban and Rural Planning

- refers to the planning for regions, towns, town sites, national and historic parks, recreation facilities, cities, municipalities and communities, and parts thereof.

## 3. Design

- the process to develop, integrate and express the major building and site systems in terms of development plans, location and massing of buildings, floor plans, elevations, representative sections and details, reports and preliminary costs so that compliance with the "Project Brief" can be determined and the preparation of working drawings and detailed specifications can begin.

## 4. Documentation

- the development and preparation of (final) plans, document details, specifications and cost estimates, including the determination of appropriate materials and construction techniques, used for project tendering, construction, operation, and facility maintenance.

## 5. Land

- includes urban, commercial, residential, industrial, rural and wilderness areas. 6.

## Physical Facilities

- includes structures of any type and developments such as buildings, roads, highways, parkways, waterways, parks, and recreational areas.

## 7. Functional Staff Authority

- a line or staff specialist who has been delegated authority, outside the formal chain of command, to determine the appropriate performance standards governing an area of work, as well as having authority to enforce these standards.

### NOTES TO RATERS

#### Project

The level determinants refer to assignments of different character, complexity and detail which either facilitate or support the delivery of architectural or related type projects. These assignments refer primarily to a sequence of project development stages (standardized events) which occur within the context of a project as illustrated in the "Project Delivery System" on page 7, and as outlined below.

#### Project Stages

1. Identification of Needs and Opportunities
2. Options Analyses and Selection
3. Project Definition
4. Design
5. Working Documents
6. Contracting
7. Construction
8. Commissioning
9. Facility Management
10. Evaluation

Each project stage is comprised of various assignments which lead to the completion of the required stage output. The scope of these assignments is defined at three levels as follows:

#### Component

- refers to a significant and essential portion of the work which either supports ongoing stage development or independently results in a stage output:

work which synthesizes, evaluates or co-ordinates several sub-component products for incorporation into a larger stage product such as planning criteria (project definition), site development plan (design), building code analysis (working drawings).

the development of stand alone parts of the required stage output; this applies separately to each planning and design discipline in assignments such as an economic and cultural resource study (project definition), architectural plans, elevations (design), technical specifications (working drawings).

#### Sub-Component

refers to an assignment which is part of a series of related activities which contribute to the completion of a stage component:

analysis or data preparation leading to the solution of a detailed problem which is dependent upon other disciplines and work; examples include listing of economic impact issues (project definition), grading or planting schemes (design), door and window details (working drawings).

#### Self-contained Assignment

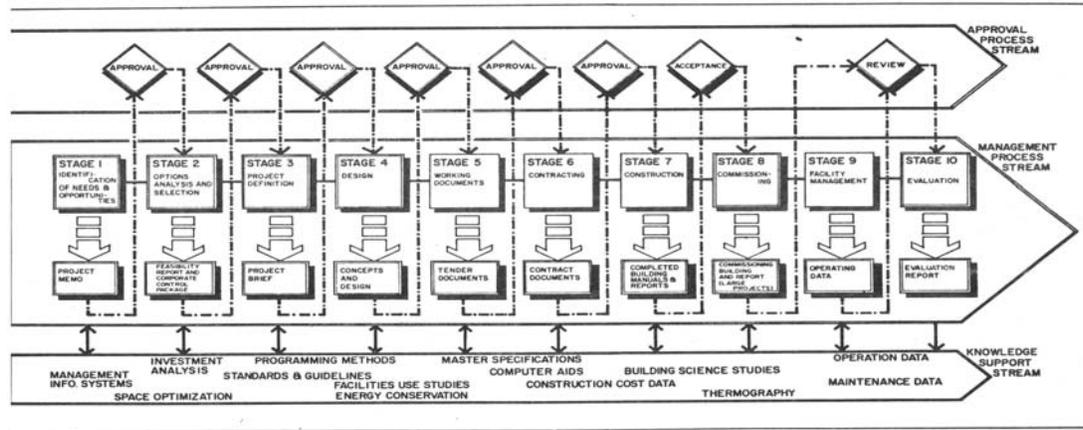
refers to the simpler types of assignments that do not depend upon the activities of others to be completed.

Planning, Design and Implementation Problems

The level determinants refer to the difficulty and complexity of problems expected to be solved according to the following definitions:

- |              |  |
|--------------|--|
| elementary   | - all the necessary data and information on which to base a solution is readily available  |
|              | - existing guidelines, standard designs, precedents, tested criteria and traditional background are directly applicable to the problem   |
| conventional | - investigation is required to supplement available data and information   |
|              | - adaptation of guidelines, standard designs, standardized techniques and methods is required to meet particular site conditions, functional requirements, or, aesthetics        |
| unusual      | - investigation, research and study are required to locate and develop the necessary data and information on which to base solution,,  |
|              | - substantial modification of, or compromise with guidelines, precedents, traditional techniques and methods is required to formulate solutions                                  |
|              | - special considerations of planning, scheduling and coordination are required to meet social, economic, ecological or other environmental factors                               |
| unique       | - extensive investigation, research and study are required to develop a data base on which to base solutions   |
|              | - significant departures from guidelines, precedents and traditional background are required to formulate solutions, which serve later as prototypes                             |
|              | - novel approaches to planning, scheduling, coordinating and executing projects are formulated to meet exceptional social, economic, ecological and other environmental factors. |

# PROJECT DELIVERY SYSTEM



LEVEL DESCRIPTIONS

There are two primary features to be considered when evaluating positions allocated to the Architecture and Town Planning Group.

- 1) Characteristic Assignments - refers to the nature of the assignments and the type of problems that have to be resolved and the breadth and depth of knowledge that are required to carry out the assignments. Refer to "Notes to Raters" for definitions of assignment and problems.

The level descriptions do not contain lengthy lists of all the possible knowledge requirements for each level. Raters are to refer to the Specification Section of each bench-mark position description for specific examples of knowledge requirements.

- 2) Responsibility - refers to the manner in which instructions, guidelines and objectives (provided or developed) influence the making of decisions and the resolving of problems and the degrees of initiative and judgment that are required to carry out and complete the assignments.

Level 1Characteristic Assignments

This is an entrance level to provide professional work experience. Varied assignments are given to facilitate professional development and understanding of the architectural work done by the department.

Responsibility

Specific instructions are given at the beginning of each new assignment and guidance is provided as the work proceeds. The work is checked in progress and is thoroughly reviewed for completeness and correctness and to assess the architect's understanding of related architectural principles, codes, departmental policies and guidelines.

Level 2Characteristic Assignments

Conducts SELF-CONTAINED ASSIGNMENTS and develops planning or design SUB-COMPONENTS which require the resolution of CONVENTIONAL problems, or develops planning or design COMPONENTS which require the resolution of ELEMENTARY problems.

Responsibility

The work is assigned in terms of problems to be investigated and tasks to be performed within specific cost and time frames. An outline of the general course of action to be followed including the necessary interfaces with other disciplines and/or team members is given at the beginning of non-recurring assignments. The work is checked in progress and is thoroughly reviewed upon completion. Most problems have been identified and solutions provided by a more senior architect.

Initiative and judgment are required to plan own work procedures and sequence to meet cost and time requirements; to locate and select pertinent data and information, and/or design standards, guidelines and existing plans; to determine effective ways of presenting information; and to develop the work to meet the requirements of assignments.

There is a requirement to investigate and propose solutions to ELEMENTARY planning and design problems.

Level 3Characteristic Assignments

Develops planning or design COMPONENTS which require the resolution of CONVENTIONAL problems, or coordinates multi-disciplinary input for individual project STAGES which require the resolution of ELEMENTARY problems.

Responsibility

The work is assigned in terms of basic requirements, costs and target dates. Work is reviewed in the early stages of development when design and planning decisions are being formulated, and again at critical stages to judge how well the product meets the objectives, requirements, cost and time frames given.

Initiative and judgment are required to plan the approach and methodology to be used; to develop schedules and cost breakdowns for elements within assignments; to identify and recommend the type and extent of studies and investigations to be undertaken and to identify and recommend the need for specialized and other professional resource input; and to coordinate, control and review work performed by staff allocated to assist with assignments.

There is a requirement to investigate and propose solutions to CONVENTIONAL planning or design problems, and to present and justify planning and design solutions to superiors. Guidance is available from a more senior architect on more difficult problem areas encountered.

Level 4Characteristic Assignments

Develops planning or design COMPONENTS which require the resolution of UNUSUAL problems, or coordinates the individual STAGES of projects which require the resolution of CONVENTIONAL problems.

Responsibility

The work is assigned in terms of objectives to be met within general budget and schedule guidelines. Completed work is accepted as professionally sound and is subject to review at critical points of development to assess achievement of performance, cost and time objectives.

Initiative and judgment are required to recommend alternative methods for meeting functional and client needs; to devise new approaches and techniques to resolve UNUSUAL design problems; to organize and coordinate multi-disciplinary investigation and research teams; and to evaluate and recommend on the implications of solutions on performance, cost, and time objectives. When coordinating a project STAGE, initiative and judgment are required to establish the objectives, basic requirements, costs, target dates and general courses of action to be followed for each COMPONENT OR SUB-COMPONENT, to allocate work to staff and to coordinate and evaluate the work of team members and consultants.

There is a requirement to investigate and propose solutions to UNUSUAL planning or design problems, and to present and justify solutions to superiors.

Level 5Characteristic Assignments

Develops planning or design COMPONENTS which require the resolution of UNIQUE problems, or coordinates the STAGES of projects which require the resolution of UNUSUAL planning and design problems. There is a continuing requirement to assign work to planning and design staff and consultants or to act as a staff authority in a planning and design area.

OR

Manages the total project delivery for architectural projects which require the resolution of conventional problems.

Responsibility

The work is assigned in terms of program and project priorities and objectives. Decisions and recommendations at this level are accepted as authoritative. Work is reviewed on the basis of the effective management and the satisfactory completion of assignments. Initiative and judgment are required to develop and implement work plans containing performance, cost and time objectives, and resource requirements. Initiative and judgment are also required to review proposals for projects, studies and services and to provide recommendations consistent with program objectives; to develop improved policies, systems, guidelines and standards; to identify and coordinate projects and activities in areas of concern to other directorates or departments and to participate in program planning. There is a requirement to review and approve solutions to UNUSUAL planning and design problems, to formulate solutions to or approaches for the resolution of UNIQUE problems, to execute functional reviews and to represent the department on interdepartmental and special committees and task forces.

Level 6Characteristic Assignments

Directs and controls the planning and design STAGES of projects which require the resolution of UNIQUE problems and manages a organizational unit providing architectural services.

OR

Manages the total project delivery for medium to large architectural projects which require the resolution of UNUSUAL problems.

OR

Provides specialized services to project development such as: technological research of a complex nature; professional liaison at the departmental/program level; quality control for architectural design and development at the national level.

Responsibility

Assignments at this level influence program development, priorities, and objectives. Initiative and judgment are required to review and approve work plans and cost, time and performance objectives developed by subordinates, or project organization resource staff; to carry out the most difficult planning and design activities and to exercise final professional approval of planning and design solutions.

There are requirements to assess the efficiency and effectiveness of the organization managed and to ensure the attainment of program priorities and objectives.

#### Level 7

##### Characteristic Assignments

Plans, coordinates and directs large multi-disciplinary organizational units, responsible on a total program basis, for all aspects of project development and delivery.

OR

Manages the total project delivery for the most complex and significant architectural projects which require the resolution of UNIQUE problems.

##### Responsibility

Assignments at this level require the development and implementation of a multi-disciplinary program and the direction and control of all aspects of project development and delivery for major architectural projects. Projects are characterized by a high degree of technical difficulty and design sensitivity, national and international significance, complex urban and environmental issues and significant and innovative procedural, management and contractual techniques. Initiative and judgment are required to plan and coordinate all professional design and construction services, to develop and implement a major architectural program within time, cost and quality parameters and to manage a large multi-disciplinary organizational unit project team or a number of project teams.

There are requirements to manage departmental programs, to participate in policy development, and to maintain effective professional relationships with senior management, Central Agencies, client departments, project managers, consultants, contractors, members of special interest groups and the public.

APPENDIX

BENCH-MARK POSITION DESCRIPTIONS

In Ascending Order

NO.	BENCH-MARK POSITION TITLE	LEVEL	PAGE NO.
9	Manager, Architectural Resources	6	9.1
8	Chief, Park Management Planning	5	8.1
7	Design Architect	5	7.1
6	Urban Designer/Planner	4	6.1
5	Project Architect	4	5.1
4	Architect	3	4.1
3	Landscape Architect	3	3.1
2	Junior Architect	2	2.1
1	Architect (Developmental)	1	1.1

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 1

Level: AR-1

Descriptive Title: Architect (Developmental)

Reporting to a Project Architect:

Duties

% of Time

Performs a variety of assignments designed to broaden skills and knowledge in the practice of architecture and to provide assistance to a project architect, such as locating information on design requirements and design problems and writing précis and brief reports on findings in accordance with instructions provided by the project architect. 30

Developing reports and publications from preliminary sketches drawn by the project architect and by referring to established design standards, drawings of similar buildings. Preparing drawings for residential buildings and specific building features and fixtures such as room layouts, wall and window details and stair designs. 60

Accompanies a project architect to meetings with client representatives, consultants, and project team members to observe work practices and methods. 10

Specifications

Characteristic Assignments

The work assignments provide initial professional experience in the investigation of design requirements, and design problems, and in the development of design components and sub-components. Assignments are for the purpose of professional development, becoming progressively more complex and carried out under the close direction of a more senior architect or supervisor. The work requires an academic knowledge of architectural principles, standards and practices and a limited knowledge of building techniques.

Responsibility

The information to be collected on design requirements and design problems is identified by the supervisor together with instructions on the methods for presenting findings. Specific instructions and a preliminary sketch of the design idea to be developed for components and sub-components of building projects are also provided by the supervisor. The work is checked in progress and is thoroughly reviewed upon completion.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 2

Level : AR-2

Descriptive Title: Junior Architect

Reporting to the Head, Architectural Unit:

Duties	% of Time
Develops designs and working documents for buildings such as married quarters, Canex buildings and garages. Prepares concept drawings, building massing and orientation drawings, interior layouts, external envelope drawings, preliminary cost estimates, architectural design drawings, elevations, floor plans and detailed drawings. Obtains information on project requirements, schedules and cost ceilings from supervisor. Obtains information and advice from supervisor to resolve procedural and technical problems relating to choices of materials, finishing, lighting intensity, spatial arrangements and other matters not covered by standards, or problems where solutions require departures from established standards.	45
Prepares working drawings including sketch plans, sections, elevations, finish schedules and interior design for buildings such as dependents' schools, messes and office buildings.	25
Conducts studies of problems in the design of existing buildings, for example to improve the energy efficiency of windows and doors. Drafts reports proposing possible measures to resolve problems for discussion with supervisor.	30

Specifications

Characteristic Assignments

The development of the design components and working documents for the variety of buildings specified requires the resolution of elementary problems. The functional requirements of such buildings do not vary, standard designs are available and the departmental data base contains all the information required to solve problems. Deviations from established design standards are referred to the supervisor. The work involved in the design of messes, schools and office buildings requires the resolution of conventional problems associated with such sub-component activities as the preparation of working drawings, sketches and schedules and the adapting of standard design to meet different site conditions, building orientations, and spatial arrangements. The identification and evaluation of the problems in the design of existing buildings are self-contained assignments to improve the efficiency of specific building features. The work requires a knowledge of architectural principles and practices and of elementary building systems and features and an understanding of departmental programs and activities.

### Responsibility

The work is assigned in terms of design components and/or sub-components to be developed, or studies to be conducted with instructions provided on the background, requirements, schedules, cost ceilings and courses of action. Problems are resolved by the study of guidelines, standard drawings and by referring to precedent and past practice. The more complex problems are referred to the supervisor for advice and guidance. Initiative and judgment are required to locate sources of information, to assess the applicability of findings to specific problems, to plan procedures and sequencing of own work and to translate design statements into drawings.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 3

Level: AR-3

Descriptive Title: Landscape Architect

Reporting to the Chief, Landscape Architecture

Duties

% of Time

Develops site planning and design components including area and site development plans, landscape design proposals, working drawings and specifications for standard Government of Canada buildings and land development and management projects. As a project team member, collaborates with other professional disciplines to identify and incorporate requirements affecting the formulation of projects, site selection, landscape and architectural planning and design. Confers with supervisor to critique site development alternatives, design concepts and proposals. Reviews project briefs, site development terms of reference, consultant planning and design proposals, feasibility studies and construction plans. Formulates and prepares area and site development concepts and proposals, site layout, grading and planting plans, landscape construction details, specifications and cost estimates. Participates on multi-disciplinary teams engaged in preparing landscape/site development guidelines, manuals and standards for the development and management of federal properties.

50

Coordinates the planning, design and preparation of working documents for the development of basic recreation and play spaces, parking areas, bicycle and walkway systems, plaza and courtyard developments, and landscape rehabilitation type projects. Identifies in discussion with supervisor, project manager and client representatives the objectives and requirements for assigned projects, determines methodology, scope of work, and resource requirements and monitors their application during the relative project stages. Confers with and obtains information from other professional experts to incorporate design elements such as area lighting, storm drainage systems, pavement design and maintenance in site development projects. Allocates work and provides direction to technical support staff. Presents and justifies site development and landscape planning and design proposals to project managers and client representatives for their approval.

30

Analyses and documents physical, environmental and ecological conditions and identifies advantages and constraints to enable appropriate site selection, site planning and design. Conducts on-site inspection during construction and advises on the acceptability of work and material. Examines sites to identify the problems of existing federal properties, proposes solutions, and prepares reports and designs to effect corrective action. Conducts post construction evaluation of projects to assess design effectiveness and performance, to determine design improvements for future projects and to develop design standards.

20

## Specifications

### Characteristic Assignments

The development of the planning and design components, such as area and site development plans, landscape design and related working drawings for federal buildings, land development and management projects requires the resolution of conventional landscape problems. Project requirements and site conditions are relatively compatible. Unique problems would be resolved with the assistance of a more senior landscape architect. The coordination of the design or working drawing stage of landscape and site development projects requires the review of readily available information and the application of established guidelines and standards or reference to similar projects and site conditions. The work requires a knowledge of landscape architectural principles, site planning practices and standardized landscape construction technology and an understanding of departmental guidelines, standards and practices.

### Responsibility

The work is assigned in terms of projects to be completed with established objectives, basic requirements and target dates to be met. There is a requirement to communicate directly with project managers to determine the scope of work and to facilitate agreements for professional services and manage related time and disbursement aspects. The work is reviewed periodically by the Chief, Landscape Architecture to ensure its conformance to established objectives and criteria. Initiative and judgment are required to identify the type and extent of investigations to be carried out, to develop work methodology and schedules, to organize studies and formulate methods for collecting, documenting and analyzing information. Judgment is required to assess planning and design proposals and construction documents prepared by consultants, regional offices and other federal departments and outside agencies.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 4

Level: AR-3

Descriptive Title: Architect

Reporting to the Superintendent, Architectural Projects:

Duties

Time

As a member of a project team, participates in the development of architectural and related engineering designs and in the preparation of approval and contract documents required for the construction or expansion of air terminal buildings, control towers, airside/groundside facilities and remote site buildings. Determines the clients' needs and objectives, obtains client concurrence with design concepts, establishes the detailed requirements for mechanical and electrical services and undertakes assigned phases of architectural services. Conducts feasibility studies, analyses statements of requirements and produces preliminary sketch plans, presentation drawings and cost estimates. Reviews working drawings, cost estimates and specifications prepared by consultants and reports the soundness of such documentation to the Project Manager.

40

Provides design and related architectural services for projects concerned with the construction or renovation of offices, workshops and flight services hangers. Develops project schedules, conducts feasibility studies and develops and evaluates requirements and alternatives. Selects the approach most suitable to meet client needs and identifies the need for consultant services. Develops the design concept, and related documentation for the clients' review and approval. Coordinates the contribution of departmental professional and technical staff assigned to the project. Coordinates the design activities of consultants and recommends the acceptance, rejection or revision of consultant drawings at the various stages of completion.

50

Serves as a member of project teams developing and updating performance and technical standards and identifying and evaluating new designs, construction practices and materials.

20

Specifications

Characteristic Assignments

Participation in the developmental stages of major airport projects and the study of public facilities in terminals, air and traffic control facilities and large service facilities requires the resolution of conventional problems. The provision of more comprehensive architectural services for smaller projects in such areas as the renovation or construction of offices and field equipment and service buildings requires the overall direction of design input and the resolution of conventional problems. The work requires a knowledge of architectural principles, building codes and standards, small scale airport design and construction standards and departmental standards and practices.

### Responsibility

The work is assigned in terms of projects to be completed. General instructions, procedures to be followed and timeframes are provided by the Project Manager. There is a requirement to communicate and collaborate with other professionals within the area of work assigned and discussions are held with representatives of other departments and airlines, tenants and users of airport facilities and consultants to determine design requirements and changes. The work is reviewed by the Supervisor to ensure conformance to established standards and criteria. Initiative and judgment are required to evaluate requirements and alternatives, to propose the design that meets the requirements, to evaluate construction change requests, to identify the need for consulting services and to recommend the acceptance, rejection or revision of consultant drawings. Judgment is also required to recommend solutions to overcome problems encountered by the Project Team.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 5

Level: AR-4

Descriptive Title: Project Architect

Reporting to the Regional Architect:

Duties

% of Time

Directs the development of architectural design input, through all project development stages, for projects such as major office buildings or convention centres. Carries out design evaluations and makes recommendations relating to project feasibility, definition development and design criteria, document preparations and presentation and design monitoring during the construction stage. Collaborates with, and coordinates the input from, other professional disciplines and provides functional advice to clients and representatives of other departments and agencies. Establishes project needs, objectives and criteria and obtains concurrence from clients on proposed design recommendations. Reviews design proposals, technical documents and cost estimates prepared by in-house staff and consultants and provides design direction to the professional and technical staff assigned to the projects. Receives direction from the supervisor on major project design strategies and proposals.

45

Leads, and provides functional advice to, multi-disciplinary teams designing service buildings, small depots or retrofits. Reviews the work performed by, and provides instruction to, in-house professionals or consultants to ensure design consistency and compliance to project objectives and standards. Coordinates, presents and justifies the design work carried out by the team and ensures that design consistency is maintained throughout all stages of project development. Directs technical design activities related to the coordination of building details, changes, scheduling, material selection during contract documentation, tendering and construction. Provides advice to the project manager on consultant performance and those contract issues related to design.

45

As directed by the supervisor, represents the resource unit in the formulating or updating of performance or technical standards, and recommends, to the supervising staff, the methods of arranging design services, the performance of design staff and consultants and the status of project designs.

10

Specifications

Degree/  
Points

Characteristic Assignments

The development of architectural design components, through all development stages and for major projects such as large office buildings, conference facilities or complex service facilities requires the assessment and resolution of unusual design problems and collaboration with professionals from other related disciplines. The architectural services provided for the smaller projects and the preparation and control of continuous design input for all stages of project development requires the resolution of conventional and unusual design problems. The work requires a knowledge of architectural and facility planning principles and concepts; building technology, codes and standards; project design and delivery techniques; scheduling and costing techniques and departmental standards and procedures. An understanding of related professional disciplines such as engineering and sociology is also required.

### Responsibility

The work is assigned by the supervisor and the stages of work or projects to be completed are established in terms of quality, time and cost objectives and general instructions are provided regarding priorities, main problem areas and procedures to be followed. The strategies developed for completing assignments, assigning work or achieving objectives are reviewed by the supervisor at the critical approval stages. Initiative and judgment are required to develop terms of reference for the projects, to establish project needs, objectives and criteria, to ensure design consistency through all project development stages and to coordinate the multi-disciplinary input within project constraints and objectives. Initiative and judgment are required to complete projects within budget and as scheduled, to ensure client satisfaction and to prevent contract liability problems for the government.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 6

Level : AR-4

Descriptive Title: Urban Designer/Planner

Reporting to Chief, Urban Design/Planning:

Duties

% of Time

Carries out and coordinates the gathering, analysis and evaluation of data and develops the requirements and criteria, master plans and design concept proposals as components of major projects related to the optimum utilization and development of federal urban lands and properties. Assigns work to other project team members e.g. urban designers, planners and technicians and reviews and approves the work in progress. 55

Conducts studies and investigations, individually or in collaboration with consultants and other specialist disciplines, to identify and evaluate new urban design practices, planning processes and trends, to determine their applicability, to predict their effectiveness and to facilitate their incorporation into departmental policy and standards, project requirements, master plans and designs for urban development. 15

Provides advice and guidance on urban design matters to Accommodation, Real Estate and Architectural and Engineering Services in regions, client departments, consultants and other government agencies to ensure that current architectural and urban design ideas, techniques and practices are recognized in project planning and design and that urban design requirements and intent are adhered to in the development of project briefs and project design concepts. During subsequent stages of project delivery collaborates with other departmental specialists from other disciplines and consultants and provides functional guidance and direction in resolving unusual and contentious urban design problems. Represents the department as a technical member on interdepartmental and intergovernmental committees involved in urban design considerations. 30

Specifications

Characteristic Assignments

The development of the urban design and planning components of major projects and of the proposals for large and complex projects of a special nature requires the resolution of unusual problems and collaboration with other professional experts. Assignments are of a special nature and importance because of the cooperative nature of the request, the urgency of the project or the significant involvement of other departments. The Sinclair Centre in Vancouver, the National Aviation Museum and the Moncton Rehabilitation Centre are examples of such projects. The work requires a knowledge of architecture and urban design principles and concepts, of project planning and delivery techniques, of departmental standards and jurisdictional requirements and an understanding of related professional disciplines in such areas as landscape architecture, economics, engineering and sociology.

Responsibility

The work is assigned by the Chief, Urban Design/Planning and the design concepts developed to meet client objectives and requirements. Initiative and judgment are required to determine and establish terms of reference for studies and projects, to identify work load requirements; to establish approaches and work methods, to brief study teams, to assign tasks and coordinate and evaluate the work of professionals and consultants, to formulate new and challenging design solutions and to develop urban design standards. General problems encountered or untried methods for the resolution of difficulties are discussed with the Chief and other professional colleagues and the recommended solutions are submitted in the form of proposals and reports for senior management consideration. Judgment is required to control and coordinate the design work of others and to recommend, reject or modify the work of consultants.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 7

Level: AR-5

Descriptive Title: Design Architect

Reporting to the Section Head, Architectural Design Management:

## Duties

% of Time

Directs and controls architectural and related engineering services from project inception through to construction, for new and existing National Defense buildings at Bases located within Canada, including the Arctic, and overseas. Identifies the immediate and long range resource requirements for the various projects assigned. Establishes budgets, priorities and time frames and the composition of design teams for each project. Identifies for Defense Construction Canada (DCC) the design consultants appropriate for particular projects. Coordinates the design team's preparation of project briefing documents describing the design requirements, the construction and performance standards, budgets, schedules and administrative procedures for each project. Evaluates consultants' proposals and recommends on consultant selection. Conducts technical and design related briefings and meetings concerning assigned projects. Carries out staged reviews of projects to ensure that objectives of time, cost and quality are being met by consultants and design teams, and that the design development incorporates and satisfies user requirements in the areas of function and aesthetics. Resolves problems encountered in the design process and reviews the impact of changed requirements to determine their effect on schedules, budgets and priorities, and confers with Section Heads in the allocation and reassignment of personnel. Examines final drawings, specifications and cost estimates, and recommends approval on behalf of the Department. Reviews consultant statements and claims for fees and recommends payment. Conducts site inspections when required and confers with DCC representatives to examine and recommend approval of changes in materials and design. Coordinates with all disciplines, the amendments to contract documents resulting from changes in requirements or on-site changes.

80

Provides architectural consulting services to Commands and Bases. Participates in the formulation of architectural policies, guidelines and standards for the Department. Assists the Construction Materials Board in assessing disputed product equivalency.

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## Specifications

## Characteristic Assignments

The provision of architectural services for individual projects or for the development stages of multiple projects relating to the design and construction of industrial, institutional and domestic buildings, "hi-tech" buildings, base development and buildings located in the Arctic requires the resolution of unusual planning and design problems. The direction and control of the projects, the evaluation and translation of user requirements and the development of cost, time and quality statements that support the Departments' commitment to contract documents and decisions requires a thorough knowledge of architectural and construction principles, a thorough knowledge of industry and departmental standards and procedures, a knowledge of project planning and administration techniques and contract administration practices and an understanding of the principles and practices governing related professional disciplines.

### Responsibility

The work is assigned in terms of project objectives that are developed in conjunction with senior management and subject to review for conformity to departmental program objectives. The decisions made and the directions provided are normally accepted by the Section Head and supported by delegated financial authority. Initiative and judgment are required to formulate and implement or evaluate and approve the technical, aesthetic and managerial aspects of design and construction. Initiative and judgment are also required to initiate feasibility studies, to evaluate the relationship between the various projects and of their effects on resources, to develop and recommend policies, procedures, techniques and standards, to direct and communicate with clients, consultants and contractors and to recommend the acceptance or rejection of consultant claims.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 8

Level: AR-5

Descriptive Title: Chief, Park Management Planning

Reporting to the Assistant Director, Programming and Development:

Duties

% of Time

Administers a regional management planning program for national and historic sites, sets objectives and establishes priorities for planning projects. Coordinates the planning program objectives with auxiliary public participation programs. Develops and implements systems for the monitoring of management plans. Directs the development of regional integration goals, objectives and program guidelines. Directs the assessment of regional, social, economic, environmental, land use and jurisdictional issues considered in the development of management plans and special studies. Assists in the monitoring of regional activities and in determining the impact of such activities on particular parks. Reviews and resolves the concerns and problems of clients and interested parties involved in cooperative planning projects. Coordinates regional participation in planning studies and in the negotiation and implementation of agreements covering the establishment of new parks and sites. Establishes the objectives and terms of reference of new park studies, directs the field investigation of systems planning studies, prepares or directs the preparation of study reports and recommends the acquisition of new parks and sites.

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Manages individual projects developing national and historic park plans. Assists in the preparation of purpose/themes and objectives statements. Approves the project's terms of reference, coordinates the input of regional staff and consultants and evaluates the product. Presents proposals to senior management, senior officials of other levels of government, native groups and the general public. Identifies the need, for special studies, determines the required resources and methods of implementation and establishes the study team.

25

Supervises professional and technical staff involved in projects and studies. Provides advice and assistance to subordinates, monitors the work in progress and prepares employee performance appraisals. Allocates human and financial resources within the Division and assists in the preparation of annual estimates and five year forecasts of regional expenditures.

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Specifications

Characteristic Assignments

The administration of regional management planning, the coordinating of program objectives with auxiliary programs and the development of regional integration goals and objectives require the resolution of unusual planning problems. The managing of individual projects and studies, the presentation of proposals to senior management and the advising of subordinates require the resolution of conventional and unusual technical and planning problems. The development of management plans, the directing of studies and the supervision of subordinates require a thorough knowledge of planning methodology, departmental and regional policies, goals and activities. Also required is an understanding of socio-economic, cultural, resource conservation and recreational concepts and practices, jurisdictional requirements and constraints and supervisory practices.

### Responsibility

The work is assigned in terms of regional program planning objectives and priorities that are subject to review for conformity to national program objectives and goals. Decisions made and recommendations proposed are presented for review by senior management, other levels of government and interested parties. Initiative and judgment are required to set objectives, establish priorities, allocate human and financial resources and develop and implement monitoring systems. Initiative and judgment are also required to manage individual planning projects, coordinate the input from staff and consultants, evaluate the product and identify the need and resource requirements of special studies.

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 9

Level: AR-6

Descriptive Title: Manager, Architectural Resources

Reporting to the Director, Architecture and Engineering Services:

<u>Duties</u>	<u>% of Time</u>
Provides the architectural consulting, senior professional and managerial services required for the preparation of project memorandum and feasibility reports, of project briefs and developments, of conceptual and preliminary designs and of contract documents. Develops technical architectural and engineering requirements and monitors the construction phase of projects. Recommends approaches to resolve design and technical problems.	40
Directs and coordinates the in-house production of architectural and related engineering designs and contract documents through project definition, conceptual, design and construction stages and the review of contract documents produced by outside consultants for unusual building projects such as hospitals, laboratories, test and research facilities, arctic construction, complexes and multiple facilities within and outside Canada. Establishes priorities, schedules and objectives for the execution of projects undertaken by or on behalf of the Department and evaluates the quality and timeliness of completed work.	35
Initiates the development of technical design criteria, goals and objectives for standard and special building types. Directs the design review process to ensure up-to-date standards, guidelines and processes are being applied and ensures project quality and program objectives are incorporated into project documents. Conducts research of innovative design practices and elements and directs studies of computer aided designs and drafting developments.	20
Supervises an architectural unit and, on an assigned basis, a multi-disciplinary team. Contributes to, and advises on forecasts, budget, resource allocations, annual and other management reports. Studies and recommends the establishment and organization of project design development teams at headquarters or at the command level. Conducts post construction studies. Represents the Department on various interdepartmental and industry committees dealing with professional building design issues.	5

Specifications CharacteristicAssignments

The provision of architectural consulting and professional services for the concurrent development of several large architectural projects being developed by in-house design teams and/or consultants requires the resolution of unique planning and design problems. The projects are being developed in a wide range of climatic and environmental conditions, including the high Arctic with its own unique design and logistic problems. The conceiving, developing and evaluation of designs and plans, the controlling of several large scale projects and the resolving of the design and planning problems requires an advanced knowledge of architectural principles and concepts, and a thorough knowledge of

building technology and jurisdictional requirements. An understanding of the concepts, methodologies and requirements of related disciplines is required to lead a multidisciplinary team. A knowledge of contract administration and supervisory practices is also required to produce contract documents and supervise the activities of professional staff.

#### Responsibility

The work is assigned in terms of policy guidelines and general directions that are prepared and submitted to the Director for review and concurrence. Objectives are developed to achieve the most favorable levels of project quality, cost and scheduling. Initiative and judgment are required to plan, organize, coordinate and control the design activities for projects and programs, to recommend the acceptance, rejection or modification of the consultants work, fees and additional claims, to interpret contractors claims and to formulate solutions to problems of design and contract documents not settled by project architects. There is a requirement for the continuous and substantive supervision of three senior architects, one intermediate architect and five technical support staff. Functional direction is provided to consultant architects, cost planners, schedulers and a support staff of 60 person years to ensure flexibility to coordinate varying workloads, to optimize the use of the expertise in various disciplines and to monitor progress and control the project quality of the Section.