**APPENDIX 6** 

# UNIVERSAL

# DESIGN

# PRINCIPLES

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### TO THE OFFICIAL PLAN OF THE TOWN OF PERTH

### UNIVERSAL DESIGN PRINCIPLES

#### **PRINCIPLE ONE:** Equitable Use

The design is useful and marketable to people with diverse abilities.

#### **Guidelines:**

- **1a.** Provide the same means of use for all users: identical whenever possible; equivalent when not.
- **1b.** Avoid segregating or stigmatizing any users.
- **1c.** Provisions for privacy, security, and safety should be equally available to all users.
- **1d.** Make the design appealing to all users.

#### **PRINCIPLE TWO: Flexibility in Use**

The design accommodates a wide range of individual preferences and abilities.

#### **Guidelines:**

- 2a. Provide choice in methods of use.
- **2b.** Accommodate right- or left-handed access and use.
- **2c.** Facilitate the user's accuracy and precision.
- **2d.** Provide adaptability to the user's pace.

#### **PRINCIPLE THREE: Simple and Intuitive Use**

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

### **Guidelines:**

- **3a.** Eliminate unnecessary complexity.
- **3b.** Be consistent with user expectations and intuition.
- **3c.** Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- **3e.** Provide effective prompting and feedback during and after task completion.

#### **PRINCIPLE FOUR: Perceptible Information**

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

#### **Guidelines:**

- **4a.** Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- **4c.** Maximize "legibility" of essential information.
- **4d.** Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- **4e.** Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

#### **PRINCIPLE FIVE: Tolerance for Error**

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

- **5a.** Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- **5b.** Provide warnings of hazards and errors.
- **5c.** Provide fail safe features.
- **5d.** Discourage unconscious action in tasks that require vigilance.

#### **PRINCIPLE SIX: Low Physical Effort**

The design can be used efficiently and comfortably and with a minimum of fatigue.

- **6a.** Allow user to maintain a neutral body position.
- **6b.** Use reasonable operating forces.
- **6c.** Minimize repetitive actions.
- **6d.** Minimize sustained physical effort.

#### **PRINCIPLE SEVEN: Size and Space for Approach and Use**

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.