DENVER AMENDMENT PROPOSAL FORM
FOR PROPOSALS TO THE 2019 DENVER BUILDING CODE AMENDMENTS AND THE 2021 INTERNATIONAL CODES

2021 CODE DEVELOPMENT CYCLE

1) Name: Mike Salisbury  Date: 3/4/2022
   Email: Mike.salisbury@denvergov.org

2) One proposal per this document is to be provided with clear and concise information.
   Is a separate graphic file provided ( “X” to answer): ___ Yes or _x_ No

3) Highlight the code and acronym that applies to the proposal

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Code Name</th>
<th>Acronym</th>
<th>Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBC</td>
<td>International Building Code</td>
<td>IRC</td>
<td>International Residential Code</td>
</tr>
<tr>
<td>IEBC</td>
<td>International Existing Building Code</td>
<td>IMC</td>
<td>International Mechanical Code</td>
</tr>
<tr>
<td>IFC</td>
<td>International Fire Code</td>
<td>DGC</td>
<td>Denver Green Code</td>
</tr>
</tbody>
</table>

AMENDMENT PROPOSAL

Please provide all the following items in your amendment proposal.

<table>
<thead>
<tr>
<th>Code Sections/Tables/Figures Proposed for Revision:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions: If the proposal is for a new section, indicate (new), otherwise enter applicable code section.</td>
</tr>
<tr>
<td>IECC*: SECTION 202 (New), C405.13 (New), C405.13.1 (New), Table C405.13.1 (New), C405.13.2 (New), C405.13.3 (New), C405.13.4 (New), C405.13.4.1 (New), C405.13.5 (New), C405.13.5.1 (New), C405.13.6 (New),</td>
</tr>
</tbody>
</table>

**Proposed:**

**Instructions:** Show the proposal using strikeout underline format.

Place an “X” next to the choice that best defines your proposal: __ Revision __ New Text _x_ Delete/Substitute __ Deletion

SECTION C202

GENERAL DEFINITIONS

The following definitions are added:

**ELECTRIC VEHICLE (EV).** A vehicle registered for on-road use, primarily powered by an electric motor that draws current from a rechargeable storage source that is charged by being plugged into an electrical current source. Plug-in hybrid electric vehicles are electric vehicles having a second source of motive power.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** Equipment used for the purpose of transferring electric energy to a battery or other energy storage device in an electric vehicle. There are two different standardized levels that are currently in use at which an electric vehicle’s battery is recharged, identified as Level 2 and Level 3.

**LEVEL 2. (accelerated charging)** Capable of charging at 40Amps or higher on a 208V or 240VAC, single phase branch circuit. An EVSE capable of simultaneously charging at 40Amps or higher for each of two vehicles shall be counted as two Level 2 EVSE. Level 2 connectors shall possess at a minimum an SAE J1772 EV plug. Other Level 2 EVSE connector types will not be restricted if listed or fieldcertified by an OSHA-approved testing lab and SAE certified.
**LEVEL 3. (fast/rapid charging)** Capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

Level 3 fast charging connectors can include but are not limited to:

1. The CHAdeMO, SAE Combo CCS ‘Combined Charging System’ and the Tesla Supercharger connector types.
2. Wireless inductive charging systems.

**ELECTRIC VEHICLE LOAD MANAGEMENT SYSTEM.** These systems (also known as ‘smart charging’, ‘power sharing’, or ‘load sharing’) are technologies that allow multiple electric vehicles to charge simultaneously while not exceeding the capacity of an electric vehicle. The use of Electric Vehicle Load Management Systems requires approval by the Building Official.

**ELECTRIC VEHICLE (EV) CAPABLE SPACE.** Electric Vehicle (EV) Capable Spaces are designated parking spaces where a basic level of infrastructure is installed to accommodate future electric vehicles.

**ELECTRIC VEHICLE (EV) READY SPACE.** Electric Vehicle (EV) Ready Spaces are designated parking spaces where the ESVE infrastructure has been installed and is made ready for electric vehicle charging.

**GROUP R.** Buildings or portions of buildings that contain any of the following occupancies as established in the International Building Code:

1. Group R-1.
2. Group R-2.
3. Group R-4 where located more than three stories in height above grade plane.

**LEVEL 3 ALTERATION.** Alterations where the work area exceeds 50 percent of the original building area or more than 10 parking spaces are substantially modified.

**RESIDENTIAL BUILDING.** For this code, includes detached one- and two-family dwellings and multiple single-family dwellings (townhouses) and Group R-3 and R-4 buildings three stories or less in height above grade plane.

Section C405.10. Electric Vehicle (EV) charging for new construction and Level 3 Alterations and subsections are added as follows:

**C405.10. Electric Vehicle (EV) charging for new construction and Level 3 Alterations.** Electric vehicle charging shall be provided and installed in accordance with this section and the National Electrical Code (NFPA 70). When parking spaces are added or modified without an increase in building floor area or a level 3 alteration, only the new parking spaces are subject to this requirement.

**C405.10.1. Group R occupancies.** Group R occupancies with three or more dwelling units and/or sleeping units shall be provided with electric vehicle charging in accordance with Table C405.10.1. Calculations for the number of spaces shall be rounded up to the nearest whole number.

The minimum required quantity of EV parking spaces shall be calculated based upon the total provided new and existing parking spaces for the building. A minimum of 70% of the required EV parking spaces shall be amongst the 50% of parking spaces located closest to the intended occupant entrance to the building served.
Table C405.10.1 EV spaces in Group R occupancies is added as follows:

**TABLE C405.10.1**

**EV SPACES IN GROUP R OCCUPANCIES**

<table>
<thead>
<tr>
<th>NUMBER OF LEVEL 2 EV READY SPACES</th>
<th>NUMBER OF LEVEL 2 EV CAPABLE SPACES</th>
<th>NUMBER OF LEVEL 2 EVSE INSTALLED SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Space</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>2-to-9 spaces</td>
<td>1</td>
<td>20% of spaces</td>
</tr>
<tr>
<td>10-or-more spaces</td>
<td>15% of spaces</td>
<td>Remainder of spaces</td>
</tr>
</tbody>
</table>

**C405.10.2 Group A, B, E, I, M and S-2 occupancies.** Group A, B, E, I, M and open or enclosed parking garages under S-2 occupancy shall be provided with electric vehicle charging in accordance with Table C405.10.2. Calculations for the number of spaces shall be rounded up to the nearest whole number. The minimum required quantity of EV parking spaces shall be calculated based upon the total provided new and existing parking spaces for the building. A minimum of 70% of the required EV parking spaces shall be amongst the 50% of parking spaces located closest to the intended occupant entrance to the building served.

**Exception:** The number of electric vehicle supply equipment installed spaces for Groups A, B, E, I, M, and S-2 Occupancies may be reduced by up to five provided that the building includes not less than one parking space equipped with an electric vehicle Level 3 EVSE and not less than one Level 2 charging electric vehicle ready space. A maximum of five spaces may be reduced from the total number of installed spaces.

Table C405.10.2 EV spaces in Group A, B, E, I, M and S-2 occupancies is added as follows:

**TABLE C405.10.2**

**EV SPACES IN GROUP A, B, E, I, M and S-2 OCCUPANCIES**

<table>
<thead>
<tr>
<th>NUMBER OF LEVEL 2 EV READY SPACES</th>
<th>NUMBER OF LEVEL 2 EV CAPABLE SPACES</th>
<th>NUMBER OF LEVEL 2 EVSE INSTALLED SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Space</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>2-to-9 spaces</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10-or-more spaces</td>
<td>10% of spaces</td>
<td>5% of spaces</td>
</tr>
</tbody>
</table>

**C405.10.2.1 Group R occupancy Parking Garages.** Group S-2 parking garages utilized as vehicle parking specifically for Group R occupancies shall be provided with electric vehicle charging in accordance with Table C405.10.1.

**C405.10.3 Accessible parking.** Where new EVSE installed spaces and/or new EV ready spaces and new accessible parking are both provided, parking facilities shall be designed so that at least one accessible parking space shall be an EV ready space.
or EVSE installed space. The accessible parking space shall be included in the total EV parking spaces as required in Tables C405.10.1 and C405.10.2.

C405.10.4 Level 2 Electric Vehicle Supply Equipment (EVSE) Requirements.

1. Each Level 2 EVSE can have one or multiple connectors. It is permissible to serve multiple parking spaces with one Level 2 EVSE so long as the connectors can adequately reach each individual designated parking space.

2. Level 2 EVSE can be equipped with cellular, wired, or wireless communications.

C405.10.5 EV Space Infrastructure Requirements. C405.10.5.1 EV Ready Spaces

1. Installation of infrastructure conduit.
   a. The conduit shall be sized and installed per the National Electrical Code and shall be no less than 1” in size.
   b. Conduits must be continuous from the future or existing panelboard or switchboard location(s) and end at a location allowing convenient, future installation of and access to the future EVSE.

2. Installation of conductors.
   a. Conductors shall be installed of sufficient size to accommodate a minimum 40Amp branch circuit to each parking space where required in Tables C405.10.1 or C405.10.2 as applicable.
   b. Conductors shall terminate in either
      i. a minimum 40Amp NEMA receptacle or SAE J1772 EV plug.
      ii. a junction or outlet box that is capped off, with the conduit sealed and the cap labeled as ‘EV Ready for Future Use’.
      iii. an EVSE installed within the parking space.

3. Electrical service and distribution capacity.
   a. Electrical loads for the EV Ready parking spaces shall be included in the utility service calculations when determining the required ampacity rating for the service equipment.
   b. The electrical loads shall be based on the quantity of EV Ready Spaces and EVSE Installed Spaces as required in Tables C405.10.1 or C405.10.2 as applicable.

4. Panelboard space.
   a. There shall be adequate reserved circuit breaker space in an electrical panelboard or reserved space within an electrical switchboard to meet the requirements of Tables C405.10.1 or C405.10.2 as applicable.
   b. This is in addition to the quantity of required EVSE Installed Spaces circuit breakers or fused switches to meet the requirements of Tables C405.10.1 or C405.10.2 as applicable.

C405.10.5.2 EV Capable Spaces.

1. Installation of infrastructure conduit.
   a. The conduit shall be sized and installed per the National Electrical Code and shall be no less than 1” in size.
b. Conduits must be continuous from the future or existing panelboard or switchboard location(s) and end at a location allowing convenient, future installation of, and access to, the future EVSE.

c. The EV Capable Space infrastructure conduit shall include installation of a pull rope or line for future conductor installation, with the conduit sealed and labeled as ‘EV Capable for Future Use’.

d. At the termination where each conduit ends at a future EVSE location, the conduit shall be sealed at a junction or outlet box that is capped off, with the conduit sealed and the cap labeled as “EV Capable for Future Use”.

2. Electrical distribution equipment room.

   a. The electrical equipment room shall provide dedicated space for the future installation of the electrical distribution equipment required to serve the EVSE. Such equipment may include service switchgear, distribution panelboards, and transformers.

   b. The future space shall be identified on all construction documents submitted for review and shall demonstrate compliance with the requirements of the National Electrical Code. The space shall not be used for any other permanent purposes so as not to restrict future installation of electrical equipment.


Section 202.
Add new definition as follows:

AUTOMOBILE PARKING SPACE. A space within a building or private or public parking lot, exclusive of driveways, ramps, columns, office and work areas, for the parking of an automobile.

DIRECT CURRENT FAST CHARGING (DCFC) EVSE: (fast/rapid charging) Capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, EVSE, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). Equipment for plug-in power transfer including the ungrounded, grounded and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, personal protection system and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE Installed Space). An automobile parking space that is provided with a dedicated EVSE connection.

ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE). A designated automobile parking space that is provided with electrical infrastructure, such as, but not limited to, raceways, cables, necessary for the future installation of an EVSE. No electrical service or panel capacity is required for EV Capable Spaces at the time of construction.

ELECTRIC VEHICLE READY SPACE (EV READY SPACE). An automobile parking space that is provided with a branch circuit and either an outlet, junction box or receptacle, that will support an installed EVSE.

Section 405.13
Add new text as follows:

C405.13 Electric Vehicle Supply Equipment. New parking facilities shall be provided with electric vehicle charging infrastructure in compliance with Sections C405.13.1 through C405.13.6.
C405.13.1 Quantity. The number of required EVSE Installed Spaces, EV Capable spaces and EV Ready spaces shall be determined in accordance with this Section and Table C405.13.1 based on the total number of automobile parking spaces and shall be rounded up to the nearest whole number.

1. Where more than one parking facility is provided on a building site, the number of required automobile parking spaces required to have electric vehicle charging infrastructure shall be calculated separately for each parking facility.
2. Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each building occupancy.
3. EVSE Installed spaces that exceed the minimum requirements of this section may be used to meet minimum requirements for EV Ready Spaces and EV Capable spaces.
4. Installed EV ready spaces that exceed the minimum requirements of this section may be used to meet minimum requirements for EV Capable spaces.
5. Requirements for a Group S-2 parking garage shall be determined by the occupancies served by that parking garage. Where new automobile spaces do not serve specific occupancies, the values for Group S-2 parking garage in Table C405.13.1 shall be used.
6. Direct Current Fast Charging. The number of EVSE Installed Spaces for Groups A, B, E, I, M and S-2 Occupancies may be reduced by up to ten per DCFC EVSE provided that the building includes not less than one parking space equipped with a DCFC EVSE and not less than one EV Ready space. A maximum of fifty spaces may be reduced from the total number of EVSE Installed spaces.

<table>
<thead>
<tr>
<th>OCCUPANCY</th>
<th>EVSE INSTALLED SPACES</th>
<th>EV READY SPACES</th>
<th>EV CAPABLE SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP A, B, E, M</td>
<td>10%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>GROUP I</td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>GROUP R-1 AND R-2</td>
<td>15%</td>
<td>5%</td>
<td>40%</td>
</tr>
<tr>
<td>GROUP R-3 AND R-4</td>
<td>2%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>GROUP S-2 parking garages</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

a. Where all (100%) parking serving R-2 occupancies are EV ready spaces, requirements for EVSE spaces for R-2 occupancies shall not apply. Exception: Parking facilities, serving occupancies other than R2 with fewer than 10 automobile parking spaces.

C405.13.2 EV Capable Spaces. Each EV Capable space used to meet the requirements of Section C405.13.1 shall comply with all of the following:

1. A continuous raceway or cable assembly shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the EV Capable space and future or existing panelboard or switchboard location(s)
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with C405.13.5.
3. The electrical equipment room shall provide dedicated space for the future installation of the electrical distribution equipment required to serve the EVSE. Such equipment may include service switchgear, distribution panelboards, and transformers.
4. The electrical enclosure or outlet and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (EVSE)."

C405.13.3 EV Ready Spaces. Each branch circuit serving EV Ready Spaces used to meet the requirements of Section C405.13.1 shall comply with all of the following:

1. Terminate at an outlet or enclosure, located within 3 feet (914 mm) of each EV Ready space it serves.
2. Have a minimum circuit capacity in accordance with C405.13.5.
3. The panelboard or other electrical distribution equipment directory shall designate the branch circuit as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure shall be marked "For electric vehicle supply equipment (EVSE)."

C405.13.4 EVSE Installed Spaces. An installed EVSE with multiple output connections/ shall be permitted to serve multiple EVSE Installed Spaces. Each EVSE installed to meet the requirements of Section C405.13.1, serving either a single EVSE Installed space or multiple EVSE Installed spaces, shall comply with all of the following:

1. Have a minimum circuit capacity in accordance with C405.13.5.
2. Have a minimum charging rate in accordance with C405.13.4.1.
3. Be located within 3 feet (914 mm) of each EVSE Installed space it serves.
4. Be installed in accordance with Section C405.13.6.

C405.13.4.1 EVSE Minimum Charging Rate. Each installed EVSE shall comply with one of the following:

1. Be capable of charging at a minimum rate of 6.2 kVA (208/240V).
2. For R-1 and R-2 Occupancies, when serving multiple EVSE Installed spaces and controlled by an energy management system providing load management, be capable of simultaneously charging each EVSE Installed space at a minimum rate of no less than 3.3 kVA.
3. When serving EVSE Installed spaces allowed to have a minimum circuit capacity of 2.7 kVA in accordance with C405.13.5.1 and controlled by an energy management system providing load management, be capable of simultaneously charging each EVSE space at a minimum rate of no less than 2.1 kVA.

4. For purposes of this section EVSE that are not DCFC EVSE shall be deemed to have a power factor of 1.

C405.13.5 Circuit Capacity. The capacity of electrical infrastructure serving each EV Ready space, and EVSE Installed space shall comply with one of the following:
1. A branch circuit shall have a rated capacity not less than 8.3 kVA for each EV Ready space or EVSE Installed space it serves.
2. The requirements of C405.13.5.1.

C405.13.5.1 Circuit Capacity Management. For R-1 and R-2 Occupancies, the capacity of each branch circuit serving multiple EVSE Installed Spaces or EV Ready Spaces designed to be controlled by an energy management system providing load management in accordance with NFPA 70, shall comply with one of the following:
1. Have a minimum capacity of 4.1 kVA per space.
2. Have a minimum capacity of 2.7 kVA per space when serving EV Ready Spaces or EVSE Installed Spaces when all (100%) of the automobile parking spaces designated for R-2 occupancies are designed to be EV Ready spaces or EVSE Installed Spaces.
3. Have a minimum capacity of 2.7 kVA per space when serving EV ready spaces or EVSE spaces for a building site when all (100%) of the automobile parking spaces are designed to be EV ready or EVSE spaces.

C405.13.6 EVSE Installation. EVSE shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594. EVSE shall be accessible in accordance with International Building Code Section 1107.

Supporting Information (Required):
All proposals must include a written explanation and justification as to how they address physical, environmental, and/or customary characteristics that are specific to the City and County of Denver. The following questions must be answered for a proposal to be considered.
- Purpose: What does your proposal achieve?
- Reason: Why is your proposal necessary?
- Substantiation: Why is your proposal valid? (i.e. technical justification)

Purpose: The purpose of this amendment is to update existing code to bring into line with national EV Ready Code ordinances and also provide additional flexibility and remove costly and less effective requirements.

Reason
Denver received feedback from the development community about challenges in implementing the current EV Ready codes. These amendments address several areas of concern including: the cost of installing conduit for all remaining spaces and the cost of electrical capacity. The amendments also provide additional flexibility in how EV charging infrastructure can be provided, which should allow developers to find cost effective methods of meeting the requirements.

In Mayor Hancock’s 80 x 50 Climate Action Plan, Denver set the goal of reducing greenhouse gas (GHG) emissions 80% by 2050. The transportation sector is the second largest source of GHG emissions in Denver and the Climate Action Plan identifies electric vehicles as one of the key ways to reduce GHG coming from vehicles. One strategy identified in the Mayor’s plan to support vehicle electrification was to ‘create building codes to require charging opportunities at multifamily units and workplaces’. This amendment seeks to continue the implementation of this strategy. To achieve these GHG reductions, Denver set a goal that by 2030 30% of vehicles would be electric, growing to 100% of vehicles in 2050. To reach these ambitious goals, there will need to be significantly more charging stations available to Denver residents and drivers. The EVI-Pro tool developed by the Department of Energy, estimates that Denver would need to have nearly 4,000 publicly available stations in 2030 to support the vehicle electrification goals. Currently, in Denver there are approximately 700 publicly available charging stations so there is significant need for additional charging stations.

Between 2020 and 2050, the state Demographer estimates that there will be 133,000 new people living in Denver, a 20% increase (Colorado Department of Local Affairs).

To serve all these new people and their associated jobs, the City’s stock of residential and commercial buildings will need to increase significantly. Making sure all these new buildings are equipped to charge electric vehicles will help increase EV adoption and save consumers and businesses a lot of money.
Denver’s buildings should address the vehicles that the major automakers have already shown us they are producing, especially as they close out the production of ICE vehicles and switch to total EV manufacturing.

Buildings built in 2022 should last 50 years. By 2045 Ernst & Young predicts internal combustion engine (ICE) vehicles will make up less than 1% of new car sales globally. Bloomberg reports that the automakers’ capital expenditures on capital equipment for electric vehicle manufacturing is important because it is the culmination of a manufacturer’s multi-year exploration of the future.

Because charging is most convenient where one is parked for long periods of time, it is important to make charging as easy as possible at residences. In particular, there are significant logistical barriers for residents of multi-family dwellings to upgrade existing electrical infrastructure and install new EV charging stations. Installing charging stations at multi-family properties has proven challenging. With just under half (44%) of its population living in multi-family properties, this is an especially important area for Denver to concentrate on. While updating the building code will not directly address existing multi-family properties, it should encourage the overall market to move in this right direction as existing properties compete with new properties for customers.

**Environmental and Public Health Benefits**

In addition to reducing GHG emissions, electric vehicles also help to clean up Denver’s air and improve public health by reducing harmful tailpipe emissions compared to gasoline vehicles. The table below shows the reduction in emissions for GHG and NOx and VOC, the two tailpipe pollutants that are precursors to ground level ozone.

<table>
<thead>
<tr>
<th>Emissions</th>
<th>2020</th>
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<tr>
<td>GHG</td>
<td>53%</td>
</tr>
<tr>
<td>NOx</td>
<td>78%</td>
</tr>
<tr>
<td>VOC</td>
<td>99%</td>
</tr>
</tbody>
</table>

EVs provide significant economic benefits for consumers through fuel and maintenance cost savings.

**Additional Information**

Electric vehicles sales are growing strongly in Colorado, indicating there will be demand for additional stations. Across 2021, EVs made up over 6% of vehicles sales in Colorado, and during the final quarter of the year they were over 10% of new vehicle sales.

Due to their lower fueling and maintenance costs, electric vehicles can provide a substantial economic benefit to lower income populations, if they have access to charging stations. Lower income households spend twice as much of their income on transportation compared to higher income households and would benefit the most from access to charging. Without these requirements it will be even more unlikely that property owners and landlords will support the installation of charging stations at lower income properties.

**Cost Impact**

The code change proposal will decrease the cost of construction for multi-family properties due to lowering the requirements for the percentage of EV Capable spaces from 80% to 40% and providing additional flexibility to reduce upstream electrical capacity. The cost may increase slightly for commercial buildings of Occupancies A, B, E and M as there are 5% higher requirements for EVSE Installed Spaces than the current code, while the I Occupancy has lower requirements. All commercial occupancies are also given greater flexibility to replace EVSE Installed spaces with DCFC Installed spaces which can also reduce costs.

**Bibliography and Access to Materials** (as needed when substantiating material is associated with the amendment proposal):

**Other Regulations Proposed to be Affected**

*For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory Denver codes and/or regulations, only.*

Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.
## Referenced Standards:
List any new referenced standards that are proposed to be referenced in the code.

## Impact:
How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

<table>
<thead>
<tr>
<th>Category</th>
<th>Increase</th>
<th>Decrease</th>
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</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>Cost of design:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrictiveness:</td>
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<td></td>
<td>x</td>
</tr>
</tbody>
</table>

## Departmental Impact (City use only):
This amendment proposal increases/decreases/is neutral to the cost of plans review.
This amendment increases/decreases/is neutral to the cost of inspections.