RELEASE FOR CONSTRUCTION (RFC) PLAN CHECKLIST STAGE 4

In addition to those items specified in Title 17, Articles 3 and 5 of the Subdivision Regulations; the following information must be addressed in the subdivision application or project documentation, as applicable, for review and approval by the City of Missoula, Public Works Department – Engineering Division

(This list is not all inclusive, other information may also be required)

Project Name: _____
City File No.: _____
Developer's Representative: _____
Date Submitted: _____

All submitted construction drawings shall include and reference the current version / latest revision of any / all applicable City of Missoula Standard Drawings. Prior to submittal, please review the City of Missoula website for current standard drawings;

Standard Drawings

STANDARD DRAWING SECTION	STANDARD DRAWING NUMBER
Curbs, Sidewalks and Driveways	100 series / STD-1nn
Streets	200 series / STD-2nn
Sanitary Sewer	300 series / STD-3nn
Miscellaneous	400 series / STD-4nn
ADA and Parking	500 series / STD-5nn
Storm Drainage	600 series / STD-6nn
Traffic Control Plans	'TC' series / TC-nnn

(All efforts are made to communicate revisions; however, standard drawings may be revised with or without notice)

STAGE NUMBER	STAGE PROCESS
1	Sewer Availability
2	Sufficiency Review Checklist
3	Preliminary Construction Plan Review Checklist
4	***Release for Construction (RFC) Plan Checklist***
5	Final Construction and Inspection Checklist
6	Documentation, As-Built and Testing Checklist
7	Warranty Inspection Checklist

SUBMITTAL DOCUMENTATION

PROJECT RFC DOCUMENTATION –

Stage 4

HARD COPY – PAPER:

_____Developer's Choice Selection for subdivisions – as per flow chart / matrix
- _____1) – Scenario 1
- _____2) – Scenario 2
- _____3) – Scenario 3

_____Engineer's Estimate of Probable Cost – for all project construction of public infrastructure (Use this format)

_____Quantities List – for quantities include sewer main lineal footage, number of stubs, and location of stubs (Address or Lot # Required) (Use this format)

_____One (1) copy of Released for Construction (RFC) Plans, D-size (24" X 36") (COMPLETE SET)

_____Five (5) copies of Released for Construction (RFC) Plans, B-size (11" X 17") (COMPLETE SET) if project is a SUBDIVISION, Three (3) copies if project is for a SEWER MAIN or any other infrastructure project

_____Include Utility Service Location Plan in RFC plan submittal; i.e. gas, power, telephone, fiber optic cable, etc.

_____One (1) copy of the Stage 4 Checklist completed / signed by engineer (this document)

_____ A copy of the MT DEQ Sanitary Sewer Approval letter is required before permits can be issued (subdivision / sewer project)

DIGITAL / ELECTRONIC:

_____Final lot / parcel layout for preliminary addressing, if *REVISED* from Stage 3 submittal (subdivision projects)
- ➔ AutoCAD® *.DWG format

_____One (1) copy of AutoCAD® *.DWG format CD containing ***ALL*** RFC Plans (all projects)

_____One (1) copy of Adobe Acrobat® *.PDF format CD containing ***ALL*** RFC Plans (all projects)
- _____D-size (24" X 36")
- _____B-size (11" X 17")

Comments

_____

SURFACE INFRASTRUCTURE

EASEMENTS

Stage 2, 3, 4

No permanent structures are allowed within easements

_____Existing easement(s)
_____Proposed easement(s)
- _____Public / Private utility easement(s) (location, width – includes; [overhead and/or buried] sanitary sewer, storm sewer, water, electric, natural / propane / high-pressure gas, petroleum, telephone, cable and other utilities)
  - ➔ Main(s) twenty (20') feet minimum easement width
  - ➔ Service(s) fifteen (15') feet minimum easement width
- _____Public / Private common service easement (for stub-outs)
- _____Public / Private drainage easement(s) (collection, retention and detention ponds)
- _____Public / Private foundation drainage easement(s) (width, location)
- _____Public / Private access easement(s) (width, location)
- _____Public / Private NO access easement(s) (width, location)
- _____Public / Private non-motorized access easement(s) (width, location [trails])
- _____Public sidewalk easement(s) (width, location)
- _____Construction easement(s) (width, location)
- _____Maintenance easement(s) (width, location)
- _____Irrigation / ditch easement(s) (width / location)
- _____Conservation easement(s) (width / location)
- _____Off-site / adjacent property(ies) easement(s) (width / location)
- _____Other_____
- _____Other_____
- _____Other_____

_____Other

Comments

_____

STREETS & ALLEYS – Paving (including; Private Roads, Short Courts, Cul-de-sacs)

Stage 2, 3, 4, 5, 7

Refer to Article 3 of the City Subdivision Regulations or the Missoula City Public Works Standard Specifications for other projects.

_____Public street / roadway
_____Private street / roadway / drive – shall be curbed
_____Public / Private street / roadway names – county verified and / or approved
_____Cul-de-sac (length, turn-around) – six hundred (600') feet maximum length
_____Short court (length, number of units served) –
- ➔ two hundred (200') feet maximum length
- ➔ twenty (20') feet minimum width

_____Overflow parking (length, width, number of spaces)
_____Street / roadway / drive layout / design cross-section – private / public short courts
_____Width / construction cross-section specifications and design (pavement thickness, base thickness, mix design, testing, type and location of pedestrian facilities / sidewalks)
_____Grades (preliminary grading plan, profiles, include vertical curve data, intersection grading is ADA compliant)
_____Cuts and fills; include topsoil and re-vegetation
_____Sight obstruction / visibility triangles; NO structures permitted in visibility triangle
_____Maintenance agreements for private street / roadway / drive, short courts (see easements)
_____Bridges / Culverts
_____Temporary turn-around, required at phase break(s)
_____Construction quantities; lineal feet and / or square feet of asphalt and / or concrete infrastructure improvements to be constructed within the public right-of-way
_____Other

Comments

_____

TRAFFIC MANAGEMENT (must fully conform with MUTCD, FHWA and MT DOT)

Stage 2, 3, 4, 5, 7

Must satisfy all requirements for; location, design criteria, minimum radii, landscaping and irrigation, signing and striping, pedestrian facilities and maintenance agreements

_____Round-a-bout(s); location, design, functional; ADA compliance
_____Traffic circle(s); location, design, functional; ADA compliance
_____Bulb-out(s); location, design, functional; ADA compliance
_____Mid-block pedestrian crossing(s); location, design, functional; ADA compliance
_____Chicane(s); location, design, functional compliance
_____Medians / island(s); location, design, functional compliance
_____Raised crosswalk(s); location, design, functional; ADA compliance
_____Speed table(s); location, design, functional; ADA compliance
_____Construction cross-section specifications and design (curb / pavement / sidewalk, asphalt / concrete thickness, base thickness, mix design, testing, type and location of pedestrian facilities / sidewalks)
_____Construction quantities; lineal feet and / or square feet of asphalt and / or concrete infrastructure improvements to be constructed within the public right-of-way

_____Other

Comments

_____

CURBING

Stage 2, 3, 4, 5, 7

_____Location
_____Curb type; "A", "B", "K" – cove, "L", standard drawings
_____Design cross-section; materials, specifications, standard drawings
_____Access points / curb cut(s); location, width, transition, type: commercial / residential
_____Controlled access; right-in / right-out, 'pork-chop' islands, etc.
_____ADA compliance – ramp; location, adjacent alignment, width, grades, landings, cross-slope, detectible / tactile warning / truncated domes, profile thru flow-line, etc.
_____Mail-stop pull-out, bus-stop pull-out, over-flow parking, etc.
_____Construction cross-section specifications and design (curb thickness, base thickness, mix design, testing, type and location of pedestrian facilities / sidewalks)
_____Construction quantities; lineal feet and / or square feet of asphalt and / or concrete infrastructure improvements to be constructed within the public right-of-way
_____Other

Comments

_____

SIGNING AND STRIPING (must fully conform with MUTCD, FHWA and MT DOT)

Stage 3, 4, 5, 7

_____Sign Plan; location, type, application, etc., per standard drawing
_____Sign material specifications; retro-reflectivity (high-intensity), dimensions - thickness, height, width, symbols, etc.
_____Sign mounting / base
_____Sign Text; wording / verbiage / message(s) / block numbers, etc.
_____Construction quantities; number of signs to be installed within the public right-of-way
_____Striping Plan; location, material, application, symbols, etc., per standard drawing
_____Striping Material Specifications; paint thickness (coverage), water-born epoxy, retro-reflectivity, color, glass bead application, etc.
_____Traffic Control Devices (traffic signals); signal type, location, material, application, etc.
_____Construction quantities; lineal feet of painted curbing and asphalt to be applied within the public right-of-way
_____Other

Comments

_____

DRIVEWAYS – Access / Approaches

Stage 2, 3, 4, 5, 7

Refer to Article 3 of the City Subdivision Regulations or the Missoula City Public Works Standard Specifications for projects that are not subdivision related

_____Location (multiple / shared, public / private street / road / drive / alley, etc.)
_____Distance from intersection; minimum distance from intersection or crosswalk
_____Width of approach(es), curb cut, must be constructed perpendicular (ninety (90°) degrees) to the adjacent street
_____Grades; eight (8%) percent maximum
_____Cross-section; as applicable to driveways, drainage cuts / fills, base / asphalt / concrete depth
_____Construction cross-section specifications and design (curb thickness, base thickness, mix design, testing, type and location of pedestrian facilities / sidewalks)
_____Construction quantities; lineal feet and / or square feet of asphalt and / or concrete infrastructure improvements to be constructed within the public right-of-way
_____Other

Comments

_____

PEDESTRIAN ACCESS – Non-Motorized Facilities; Sidewalks, Trails, Bicycles

Stage 2, 3, 4, 5, 7

_____Sidewalk design
- _____Location; both / one side(s) of street, other / additional location(s)
- _____Width, cross-section, material, etc. – standard drawings
- _____Sidewalk and boulevard width per approved construction plans
- _____Construction cross-section specifications and design (concrete sidewalk thickness, base thickness, jointing, mix design, testing, type and location of pedestrian facilities / sidewalks)
- _____Backfilling boulevard and adjacent to sidewalk

_____ADA compliance; location, width, ramps / grades, landings, cross-slope, detectible warning / truncated domes, etc.
_____Trail (width, location)
_____Connections; between on-site pedestrian facilities, parks, common area(s), with adjacent property(ies) / subdivision(s), etc.
_____Street-crossing (mid-block, bulb-out, etc.)
_____Bike lanes (width, location)
_____Bridges, non-motorized access; pedestrians, bicycles, trails, etc.
_____Other

Comments

_____

PARKING – Overflow

Stage 2, 3, 4, 5, 7

_____Location; distance from intersections, access, type; parallel, head in / back in, angled: 90°, 60°, 45°
_____Dimensions; length, width
_____Grading and drainage
_____Parking Signage
_____Pedestrian access; connection to sidewalks, trails, etc.
_____ADA compliance; width, ramps / grades, landings, cross-slope, etc.
_____Other

Comments

_____

BUS STOPS

Stage 2, 3, 4, 5, 7

_____Location; distance from intersections, signing, configuration, standard drawings
_____Pedestrian Access; connection to sidewalk, trails, etc.
_____ADA compliance; width, ramps / grades, landings, cross-slope, etc.
_____Other

Comments

_____

CLUSTER MAIL BOX FACILITIES (U.S.P.S. Postmaster approval required)

Stage 2, 3, 4, 5

_____Location
_____Pedestrian Access; connection to sidewalk, trails, etc.
_____ADA compliance; width, ramps / grades, landings, cross-slope, etc.
_____Documented U.S.P.S. (Postmaster) concurrence with location / design, letter of approval
_____Other

Comments

_____

STREET LIGHTS

Stage 2, 3, 4, 5

_____Location, minimum; intersections, pedestrian crossings, mid block pedestrian crossings, etc.

_____Maintenance agreement; covenants
_____Lighting District information
_____Compliance with Missoula Outdoor Lighting Ordinance – MMC 8.64
_____Other

Comments

_____

SURFACE DRAINAGE

Stage 2, 3, 4, 5, 7

_____Natural drainage; existing *both* on-site and adjacent off-site
_____Storm drainage; calculations, location on-site / off-site, collection / retention / detention, and source areas
(see also 'STORM SEWER' section below in 'UTILITY INFRASTRUCTURE' review)
_____Surface drainage – existing / proposed; calculations, cross-sections, overflow, crossings: culvert / bridge sizing, vegetation, etc.
_____Surface drainage – individual lots
  _____Swales: between lots and through development / subdivision
  _____Covenants
  _____Building permit specific conditions / requirements
  _____Other
_____Foundation drains (separate collection system for foundation drainage on hillside development)
_____Maintenance; public / private, homeowner's association, agreement(s)
_____Structures: inlets, sumps, manholes; location, design, capacity, etc.
  ➔ One (1) per ten thousand (10,000 S.F.) square feet, minimum
_____Construction quantities; structure inventory, type and lineal feet to be constructed within the public right-of-way
_____Other

Comments

_____

_____

EROSION CONTROL (must fully conform with EPA and MT DEQ)

Stage 2, 3, 4, 5, 7

_____Montana DEQ one (1) copy <u>*each*</u> required; (See Stage 3 Summary and Checklist for more information).
  _____SWPPP approval letter
  _____SWPPP approved plan
  _____SWPPP Notice Of Intent (NOI)
_____SWPPP (Storm Water Pollution Prevention Plan) required;
  _____Reference to and include City of Missoula standard drawings, where applicable
  _____Apply specific treatments

_____Apply to specific locations
_____Include design specifications
_____BMP (Best Management Practices); specifications
_____Maintenance responsibility(ies); shall remain in place and be adequately maintained throughout the duration of all site development and individual lot construction
_____Other

Comments

_____

_____

UTILITY INFRASTRUCTURE

SANITARY SEWER

Stage 2, 3, 4, 5, 7

_____Type (Gravity, S.T.E.P., Force, Dry lay)
_____State D.E.Q. approval letter
_____County review for additional county rules and regulations
_____Conformance to City, County and State specifications and requirements; thrust restraint on mains over twenty (20%) percent grade, ownership, etc.
_____Structures; location, access,
_____Manholes; location, access, type
_____Gravity mains; location, sizing, profile, separation, specifications, calculations, etc.
_____Lift stations; location, sizing, access both to site and internal, security, specifications, etc.
_____Force mains; location, sizing, profile, ports, valves, etc.
_____S.T.E.P. systems and appurtenances designed and engineered for commercial use
_____S.T.E.P. mains; location, sizing, profiles, ports, valves, etc.
_____S.T.E.P. Tanks and appurtenances; residential, commercial and community
_____Floodplain requirements
_____Shallow groundwater requirements
_____Stub-outs; location, property marked
_____Specifications; pipe type(s), sizing, bedding, gradations, marking and compaction
_____Number and location (by lot) of stub-outs for auditing and permitting purposes
_____Other

Comments

_____

STORM SEWER

Stage 2, 3, 4, 5, 7

_____Type (Gravity, S.T.E.P., Force, Dry lay)
_____Conformance with current E.P.A. and state (MT D.E.Q.) rules, regulations and practices
_____Mains; location, sizing, profile, separation, specifications, calculations, etc.
_____Appurtenances; manholes, inlets, grates, outfalls, diffusers, beehives, etc.
_____Access; appurtenances, collection / retention / detention systems, etc.
_____Specifications; pipe type(s), sizing, bedding, gradations, marking and compaction
_____Shallow groundwater requirements
_____Other

Comments

_____

WATER (reviewed by Mountain Water Company and City Fire Department)

Stage 2, 3, 4, 5, 7

_____Conformance with current state (MT D.E.Q.) rules, regulations and practices
_____Mains; size, location, valves, separation, etc.
_____Stub-outs; location, property marked
_____Fire protection; mains to structures: commercial, industrial and residential
_____Hydrants; location within 500 feet, clear zone, charged, verified and approved by Fire Department
_____Other

Comments

_____

UTILITIES

Stage 2, 3, 4, 5, 7

_____Master Plan
_____Gas; location, placement of related appurtenances, etc.
_____Electric; location, placement of related appurtenances, street lights, etc.
_____Communications – telephone, television, etc.; placement of related appurtenances
_____Construction quantities; lineal feet of each utility for auditing and permitting purposes
_____Other

Comments

_____

APPLICANTS CERTIFICATION:
All information has been reviewed by me and to the best of my knowledge all requirements have been satisfied and this submittal is true and accurate.

_____

Developer Representative's Signature Date