Project Name:

Project Location:

Reviewer:

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| All documents, design standards, specifications, and forms should be taken from the website each time they are used – this is where the most current information is kept. We do not notify customers when changes are made. | | | | |
| # | **OK** | **NEED** | **N/A** | **General Plan Design** |
| G1 |  |  |  | Plans should be submitted with “NOT APPROVED FOR CONSTRUCTION” noted on each plan sheet. |
| G2 |  |  |  | Return ***electronic PDF*** copy of the revised plan sets for review and/or approval. |
| G3 |  |  |  | Plans are of high quality (legible) and in the correct scale |
| G4 |  |  |  | Each plan sheet has north arrow, graphic scale, date, title block, and sheet number |
| G5 |  |  |  | Each plan sheet is sealed, signed, and dated by a Professional Civil Engineer. |
| G6 |  |  |  | Standard City of Meridian notes are included in the plan set and City notes are listed first.  ***Updated notes can be found at meridiancity.org, navigate to:***  City Government > Community Development > Land > Civil Plan Review and Submittal Standards |
| G7 |  |  |  | Correct “City of Meridian Supplemental Specifications to the ISPWC” drawing numbers are used. |
| G8 |  |  |  | If this project has multiple buildings on a single lot and had a preapplication meeting with planning on or after 10/14/2021, developer provided a signed “multiple buildings on a single lot” memo. |
| G8 |  |  |  | All plan sheets should have a 2’’ high by 3’’ wide open space on the top left-hand corner for the approved for construction stamp to be placed. Remove any City review stamp template from the plan sheet. Other agency stamps (e.g. ACHD) can remain if that agency deems it appropriate. |

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| # | OK | NEED | N/A | Cover Sheet Design |
| C1 |  |  |  | Cover sheet includes developer contact information (including a phone number and email address) |
| C2 |  |  |  | Cover sheet includes engineer contact information (including the engineering firm, phone number, and email address) |
| C3 |  |  |  | Cover sheet includes a sheet index |
| C4 |  |  |  | Cover sheet includes a vicinity map which shows city limits (if applicable), adjacent subdivision(s) including names and lot lines, and street names. |
| C5 |  |  |  | Cover sheet includes project benchmarks and datum. |
| C6 |  |  |  | Cover sheet includes Digline number |
| C7 |  |  |  | Cover sheet includes QR Code. |
| C8 |  |  |  | Cover sheet includes Accela (Citizen Access Portal) Record ID / Permit Number |

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| # | OK | NEED | N/A | Water Main Design |
| W1 |  |  |  | Existing water main alignment and diameter, meters, valves, blow-offs and hydrants are shown and existing facilities have been field surveyed. |
| W2 |  |  |  | All wells are identified in the plan view, with the following note:  *“Existing well(s) must be disconnected from any buildings that remain with verification of disconnect by Meridian Public Works Department*.  *Wells that will not continue to be used must be properly abandoned, documentation of abandonment will be required to be submitted to the City. Contact Idaho Department of Water Resource for abandonment.”* |
| W3 |  |  |  | Vertical and horizontal separation between potable mains/services and non-potable mains/services have been addressed.  Identify all potable/non-potable main interferences with a reference to Water Note #2.  Identify all potable/non-potable main/service or service/service interferences reference to Water Note #3. |
| W4 |  |  |  | Water mains are extended to all adjacent parcels to comply with the City’s “to and through” policy. |
| W5 |  |  |  | No size-on-size taps are present. Tees are required for size-on-size pipes. (For proposed hot taps verify existing mainline valve spacing. Check with PW to see if a mainline valve should be added, if so cut-in tee with valves required) |
| W6 |  |  |  | **Unused services and mains are abandoned** at the remaining main by removing the gate valve and installing a blind flange.   * Any unused service lines are abandoned at the main by closing the corporation stop, removing the service line, and installing a cap or copper disk at the back of the fitting. * Valves and blow-offs are not abandoned in place (remove these and install blind flanges where appropriate). |
| W7 |  |  |  | Water mains are North and East of roadway centerlines, 4 feet off lip of gutter; if water is out of corridor, a utility variance from each affected utility will be required. |
| W8 |  |  |  | Water mains are not within landscaped areas. |
| W9 |  |  |  | ***Easements are graphically depicted on the plan set.*** All water mains, hydrants, and water meters must be located within an easement if they are outside of the right of way. Water Lines, fire hydrants and services up to the meter require 20’ Easements. Easement to extend 10’ beyond fire hydrant, water meters or termination of the main. Sewer and Water running Parallel require 30ft Easement.  ***Updated easement forms can be found at meridiancity.org, then navigate to:***  City Government > Community Development > Land > Easements |
| W9A |  |  |  | No permanent structures can be within an easement or over a water main. This includes buildings, carports, trash enclosures, trees, deep rooting bushes, etc. |
| W10 |  |  |  | Construct 14-foot wide gravel access road over sewer mains in unimproved areas. Specify 10 inches of ¾ inch road mix or equivalent, on a stable, compacted subgrade. Roadway must be centered over main(s). |
| W11 |  |  |  | Water lines are designed in a looped system with dead ends minimized. |
| W12 |  |  |  | Water main diameters are 8 inches (excluding hydrant laterals) and 12 inches on section line and near midsection line roads; or as otherwise required by Public Works Engineering. |
| W13 |  |  |  | Pipe diameters and lengths are labeled from fitting to fitting on the plan view. |
| W14 |  |  |  | All water pipe fittings are labelled on **each** water sheet where the fitting is shown. |
| W15 |  |  |  | Degree of angle is labelled for all bends (roping not allowed). |
| W16 |  |  |  | Pipe joint deflection does not exceed ½ the pipe manufacturer’s allowable deflection.   * Note on plans that the contractor is required to verify the deflection angle. |
| W17 |  |  |  | There are at least two (2) valves at all tees and at least three (3) valves at all crossings. Valves should be placed on the sides of the tees/crossings that provide supply (leg without supply is the leg without a valve). |
| W18 |  |  |  | All valves shall be a minimum of 4’’ |
| W19 |  |  |  | Valve spacing for commercial developments doesn’t exceed 500 feet (in areas without customer connection, valve spacing does not exceed ¼ mile). |
| W20 |  |  |  | All fire lines are shown on plans, including size and location of jurisdictional valves. |
| W21 |  |  |  | 2" blow-off is installed at the termination of temporary dead end water mains.   * Collars are required on all blow-offs. |
| W22 |  |  |  | Blow-off are removed from all permanent mains that will not be extended including commercial service lines that have meters, fire lines, or hydrants off the lateral.   * Install blind flanges when appropriate. |
| W23 |  |  |  | Fire hydrant spacing does not exceed 300 feet |
| W24 |  |  |  | Locate stations shall be installed every 500 feet. Hydrants serve as a locate station. |
| W25 |  |  |  | Hydrants are located on the water main side of centerline and at intersection curb returns. |
| W26 |  |  |  | Hydrants are not connected to fire sprinkler lines. |
| W27 |  |  |  | If a Fire Department Connection (FDC) is required, a fire hydrant is located a no more than 100 feet from the FDC and at least 40 feet from the building (unless otherwise approved by Fire). |
| W28 |  |  |  | Dead ends that will not be extended are terminated with a hydrant. |
| W29 |  |  |  | Casings are provided for all water crossings of gravity irrigation facilities.   * Casings shall have a minimum of 3 feet of cover from the lowest point of the waterway to the top of the casing. |
| W30 |  |  |  | Valves are placed on either side of an open waterway (canal, river, stream, etc.) crossing 15 feet or wider.   * A monitoring connection on the feed side of the crossing must be added to check for leakage (DEQ requirement). |

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| # | OK | NEED | N/A | Water Service Design |
| W31 |  |  |  | All building lots have a water service line. |
| W32 |  |  |  | Water services are installed perpendicular to the main. (Relocating of existing water service by bending and fusing/splicing of existing service is not allowed) |
| W33 |  |  |  | Water meters are to be installed North or East of property lines. |
| W34 |  |  |  | Water service, meter size, and meter setter size are specified on the plans. |
| W34A |  |  |  | Valve near meter vault is shown on plan for 1.5” and 2” water meters per std W4. Valve must be shown 12” from back of sidewalk/curb/gutter |
| W35 |  |  |  | Water meters over 1 inch match the size of the service lines from the main to the meter pit. |
| W36 |  |  |  | Water service lines are not tapped into fire services lines or hydrant laterals. |
| W37 |  |  |  | Water service lines are placed in water class pipe sleeves where subsurface storm drain water infiltration beds or storm drain infiltration swales are encountered. |
| W38 |  |  |  | Fire service lines are placed a minimum 10 feet apart horizontally from all 4-inch water meters. |

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| # | OK | NEED | N/A | Sewer Main Design |
| S1 |  |  |  | Existing sewer main alignment and size, manholes, cleanouts, slope/grade and inverts are shown and labelled /existing facilities that they have been field surveyed. |
| S2 |  |  |  | Any unused sewer mains or service lines must be abandoned. |
| S3 |  |  |  | Existing septic systems or drain fields are shown and have the following note:  *“Existing septic tanks and sewer drain fields must be abandoned in accordance with Central District Health Department requirements.”* |
| S4 |  |  |  | Sewer mains are extended to all adjacent parcels that flow to the same sewer shed to comply with the City’s “to and through” policy. |
| S5 |  |  |  | Sewer mains are in a corridor lying 5 feet North or East to 10 feet South or West of roadway centerlines. If sewer is out of corridor, a utility variance from each affected utility will be required. |
| S6 |  |  |  | ***Easements are graphically depicted on the plan set.*** All sewer mains must be located within an easement if they are outside of the right of way. Main should be centered within easement. Easement width dependent on depth of sewer. See Public Works for easement width requirements.  ***Updated easement forms can be found at meridiancity.org, then navigate to:***  City Government > Community Development > Land > Fees, Forms, and Easements |
| S6A |  |  |  | No permanent structures can be within an easement or over a sewer main. This includes buildings, carports, trash enclosures, trees, deep rooting bushes, etc. |
| S7 |  |  |  | Construct 14-foot wide gravel access road over sewer mains in unimproved areas. Specify 10 inches of ¾ inch road mix or equivalent, on a stable, compacted subgrade. Roadway must be centered over main(s). |
| S8 |  |  |  | Sewer mains are not within landscaped areas. |
| S9 |  |  |  | Plan and profile views are drawn on the same sheet. |
| S10 |  |  |  | "T type" clean-outs or manholes are used at the end of mains.   * Manholes should be used at the end of any permanent lines that are 150 feet or longer and/or when the adjacent property has different ownership. No more than 4 services can be served off a main ending in a clean-out. |
| S11 |  |  |  | Cover from top of pipe to finished grade is not less than 3 feet. |
| S12 |  |  |  | Finished grade and existing ground lines are shown and labeled in the profile view. |
| S13 |  |  |  | Class 200 SDR-21 is specified on all sewer mains and service lines with less than 3 feet of cover from top of pipe to natural ground (in unimproved areas) or subgrade. |
| S14 |  |  |  | Manholes are consecutively numbered in plan and profile. |
| S15 |  |  |  | Manhole stationing is shown in the profile. |
| S16 |  |  |  | Manhole inverts with directions, are identified in the profile view. |
| S17 |  |  |  | Manhole spacing does not exceed 400 feet for pipe diameter 15’’ or less, 500 feet for 18’’ to 30’’. |
| S18 |  |  |  | Manhole diameters conform to Supplemental Specifications to the ISPWC |
| S19 |  |  |  | Slope, diameter, and length of sewer main is shown in the profile view. |
| S20 |  |  |  | Pipe slopes and diameter conform to 10 State Standards. |
| S21 |  |  |  | There is a 0.1’ drop to the invert out. |
| S22 |  |  |  | Sewer or Roadway stationing and marks are shown on the plan view. |
| S23 |  |  |  | Angles through manholes are shown in the plan view (includes services constructed out of manholes). |
| S24 |  |  |  | Casings are provided for all sewer crossings of gravity irrigation facilities.   * Casings shall have a minimum of 3 feet of cover from the lowest point of the waterway to the top of the casing. |

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| # | OK | NEED | N/A | Sewer Service Design |
| S25 |  |  |  | All building lots are served. |
| S26 |  |  |  | Sewer service lines are installed perpendicular to sewer mains. |
| S27 |  |  |  | Service lines have a minimum 2% grade to the property line |
| S28 |  |  |  | Service lines are a minimum 6 inch diameter. |
| S29 |  |  |  | 5 feet of separation between sewer services is maintained. |
| S30 |  |  |  | 5 feet of separation between sewer service and ***outside of a manhole*** is maintained. |
| S31 |  |  |  | Sewer service lines are placed in water class pipe sleeves where subsurface storm drain water infiltration beds or storm drain infiltration swales are encountered. |

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| # | OK | NEED | N/A | Pressure Irrigation Design |
| PI1 |  |  |  | Plans include a pressurized irrigation system design. |
| PI2 |  |  |  | Ownership of the new PI system is stated |
| PI3 |  |  |  | PI backup source is stated. \*\*Reuse water is not considered a backup source of irrigation. |
| PI4 |  |  |  | All pressurized irrigation systems should utilize surface water as the primary source if available. |
| PI5 |  |  |  | If domestic water is used as the secondary source, a single point connection between the domestic water and pressurized irrigation system is required. |
| PI6 |  |  |  | If City water is used as an irrigation source, the meter fee and common area irrigation assessments must be paid by the owner/developer*.* ***An area for assessment is provided.*** |
| PI7 |  |  |  | Water meter for secondary is located in a common area. |
| PI8 |  |  |  | Meter size and setter size are specified on the plans. |
| PI9 |  |  |  | A reduced pressure back-flow assembly (RPBA) is provided for pressurized irrigation single point connection to domestic water.   * Add a note that states “RPBA must be approved by the State of Idaho, Department of Environmental Quality and Meridian Water Department.” |
| PI10 |  |  |  | Mains are south and west of property lines. |
| PI11 |  |  |  | Mains are located in rear and side lot line utility easements or common lots. |
| PI12 |  |  |  | Mains are not located along the front lot lines. |
| PI13 |  |  |  | All main crossings of public rights of way, private roadways and travel ways are sleeved with C-900 and have valves placed 10 feet outside the right of way or travel way. |

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| # | OK | NEED | N/A | Gravity Irrigation Design |
| GI1 |  |  |  | All open ditches are tiled. |
| GI2 |  |  |  | Pipe diameter, slope, and length is shown. |
| GI3 |  |  |  | Manhole/box diameter is 4 feet or greater. |
| GI4 |  |  |  | Spacing of manholes does not exceed 400 feet. |

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| # | OK | NEED | N/A | Private Drainage System Design |
| D1 |  |  |  | Plans are stamped by an Idaho Professional Engineer/Licensed Architect. |
| D2 |  |  |  | Necessary calculations are provided by an Idaho Professional Engineer/Licensed Architect (e.g. storm return frequency and duration, runoff volume, peak discharge, storage volume, outflows, etc.) |
| D3 |  |  |  | Calculations are made to the 100-year-storm event. |
| D4 |  |  |  | All drainage is retained and disposed of on site.   * If discharge drainage is included, then a fully executed permit or agreement to discharge offsite must be submitted prior to plan approval (unless system is owned and operated by ACHD and ACHD is the approving authority). |
| D5 |  |  |  | Copy of geotechnical report included, and indicates seasonal high ground water elevation, soil classifications, and percolation rates. |
| D6 |  |  |  | Drainage facilities do not conflict with other utilities. |
| D7 |  |  |  | Building finish floor elevation shown is above possible maximum water surface elevation. |
| D8 |  |  |  | Stormwater pre-treatment provided (i.e., Sand/Grease Trap, Bio-Filter, etc.). |
| D9 |  |  |  | Drainage basin drawn to scale on plans. |
| D10 |  |  |  | Potable water main, services, meter, and fire hydrants have a minimum of 25’ horizontal separation from all seepage beds |

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| The Following items are Intended for Consultant / Developer Informational Use Only: |
| All checklist items must be addressed before a project approval letter can be issued.  Applicant shall be responsible for application and compliance with any Section 404 Permitting that may be required by the Army Corps of Engineers.  Applicant shall be responsible for application and compliance with any NPDES Permitting that may be required by the EPA.  Applicant shall be responsible for application and compliance with any Irrigation District requirements. |