

West Side Woods Subdivision Phasing Plan

The project will be built out in four different phases that will be implemented over 6 years. The phasing boundaries are shown on the attached preliminary plat. Further, exhibits are provided showing the infrastructure needs for each phase. The breakdown of each phase is outlined below:

Phase 1:

- Phase 1 includes 28 single-family residential lots, 2 multi-family lots with 28 condo units, and 2 open space lots on the northeast side of the subject property. One of the open space lots is located on the south side of the subject property. This portion of the project is directly adjacent to Hauser Boulevard.
- Phase 1 will be final platted by December 2023

Parkland Dedication

- Per the parkland dedication calculations found in Tab 2t, Phase 1 requires 0.77 acres of parkland dedication. The applicant proposes to dedicate Lot 12, Block 7 on the south side of the property to the City of Helena with Phase 1 to meet the parkland requirements for all phases. Lot 12, Block 7 is 4.49 acres. The applicant also proposes 282-ft of trail construction within Open Space lot 15, Block 2 and 1,484-ft of trail construction in Lot 12, Block 7 open space lot to be dedicated to the City of Helena.

Roads

- The phase will construct three roads Crowley Court, Livezey Avenue/Livezey Court and Lee Court. Livezey Avenue and Crowley Court will both have direct access from Hauser Boulevard.
- An emergency access road will be constructed to the south to provide a secondary access for Phase 1. The emergency access road will be constructed within the footprint of proposed roads to be constructed in Phase 3 and will follow the horizontal and vertical alignments of the future roads ensuring that the emergency access will meet City design standards.
- Hauser Boulevard will be upgraded as part of necessary off-site improvements for Phase 1, as recommended in the Traffic Impact Study. The portion of Hauser Boulevard immediately adjacent to the proposed subdivision boundary and extending north to Overlook Estates will be upgraded to the City's local road standards with pavement, curb and gutter, boulevard, and sidewalk. The portion of Hauser immediately south of the subdivision boundary to the intersection with Park Drive will be paved only to the City's local road width. The portion of Hauser from the intersection of Park Drive to the intersection with Granite Avenue will be paved only to the City's minor collector road width.

Water

- Water to Phase 1 will be provided via three connections to existing City of Helena water mains. One connection to an existing 10-inch diameter main along Hauser Boulevard will be made to provide services along Crowley Court. A second connection to the existing 10-inch diameter main along Hauser Boulevard will be made to provide services to lots along Livezey Avenue/Livezey Court and Lee Court. The water main will be extended north on Lee Court to connect to an existing 8-inch diameter water main on Overlook Boulevard and to provide a looped connection. Seven fire hydrants are proposed for Phase 1 and one blowoff hydrant at the end of Lee Drive.
- No off-site improvements are required for Phase 1 of the water distribution system.

Sanitary Sewer

- Gravity sanitary sewer collection mains and manholes will be provided to service all lots within Phase 1. A new collection main will be installed along Hauser Boulevard and connect to an existing manhole to the north at the southern boundary of the Overlook Estates Subdivision. Sanitary sewer mains along Crowley Court and Livezey Avenue will be constructed and designed to convey flows to the east to the new main on Hauser Boulevard. Additional sanitary sewer mains will be installed along Lee Drive/Lee Court and connect to an existing manhole at the south end of Overlook Boulevard. A short collection main on Livezey Court to the west will be installed to convey flows to the collection main on Lee Court.
- No off-site improvements are required for Phase 1 of the sanitary sewer system.

Stormwater

- Stormwater for Phase 1 will include the installation of 2 stormwater ponds, buried stormwater pipes, and a conveyance ditch. One of the stormwater ponds, designated as Pond B in the Preliminary Engineering Report, will be constructed on the south side of Livezey Avenue within the existing ephemeral drainage footprint. An additional stormwater pond, designated as Pond A in the Preliminary Engineering Report, will be constructed in the northwest portion of the subdivision within an existing ephemeral drainage footprint. Each stormwater pond is designed to treat the water quality event and detain runoff flows per the City's recommendations.
- Buried stormwater conveyance pipes from each pond will convey stormwater north of Pond A. North of Pond A the stormwater will be conveyed through newly installed pipes in Overlook Boulevard and tied into existing stormwater infrastructure in Overlook Boulevard. The stormwater will then be conveyed to the Overlook Estates Subdivision detention pond and then routed through the existing downstream conveyance system until it reaches Spring Meadow Lake.



- A stormwater conveyance ditch is proposed to collect surface runoff from Lot 14, Block 2 and a portion of the Open Space lot, Lot 15, Block 2. This surface runoff will be conveyed to Pond B to be treated for the water quality event.
- No improvements downstream of the Overlook Estates' detention pond are required for Phase 1 of the stormwater system.

Phase 2:

- Phase 2 includes 10 single-family residential lots, 1 multi-family lot with 20 condo units, and 1 open space lot. This phase is located on the northwest side of the subject property and has access from an internal road constructed as part of Phase 1, Livezey Avenue.
- Phase 2 will be final platted by December 2025.

Parkland Dedication

- Per the parkland dedication calculations found in Tab 2t, Phase 2 requires 0.26 acres of parkland dedication. The applicant proposes to dedicate Lot 12, Block 7 on the south side of the property to the City of Helena with Phase 1 to meet the parkland requirements for all phases. Lot 12, Block 7 is 4.49 acres. The applicant also proposes 2,061-ft of trail construction within Open Space lot 7, Block 5.

Roads

- Livezey Court will be extended to the west and a cul-de-sac will be constructed at the end of the single-family lots section. Livezey Court will also include a private road extension to provide access to the condos on the multi-family lot with a hammerhead turnaround.
- No off-site improvements are required for Phase 2 of the road infrastructure.

Water

- The water distribution system for Phase 2 will involve the extension of the water main constructed as part of Phase 1. The water main extension will follow Livezey Court to the west. At the Livezey Court cul-de-sac the water main will be extended to the north along the private drive portion of Livezey Court to provide service to the condo units. At the cul-de-sac, the water main will also be extended to the south following lot lines and will terminate at the phase boundary. The water will be extended during Phase 3 to provide a looped connection. Two fire hydrants will be installed as part of Phase 2.
- No off-site improvements are required for Phase 2 of the water distribution system.

Sanitary Sewer

- The sanitary sewer collection system for Phase 2 will involve the extension of the sewer main to the west on Livezey Court from the previously installed sewer main from Phase 1, which will provide services for the majority of the Phase 2 lots along Livezey Court. Another manhole and collection main will be installed beginning at the center of the Livezey Court cul-de-sac and then running north



along the Livezey Court private road. At the end of the private road hammerhead, the sewer main will run to the east through the open space lot, around the proposed stormwater pond, and connect to an existing manhole at the southern end of Overlook Boulevard.

- No off-site improvements are required for Phase 2 of the sanitary sewer system.

Stormwater

- Stormwater improvements for Phase 2 will consist of installing inlets and buried stormwater pipe at the vertical curve sag location in Livezey Court to convey runoff to stormwater Pond A. Additional stormwater inlets and conveyance pipe will be installed near the end of the hammerhead on Livezey Court to convey stormwater runoff to stormwater Pond A.
- No off-site improvements are required for Phase 2 of the stormwater system.

Phase 3:

- Phase 3 includes 43 single-family residential lots and 1 open space lot. Phase 3 is located on the south side of the subject property and will be accessed by internal roads created with Phases 1 and 2, Livezey Avenue and Lee Drive. Phase 3 will also have direct access from Park Drive.
- Phase 3 will be final platted by December 2027.

Parkland Dedication

- Per the parkland dedication calculations found in Tab 2t, Phase 3 requires 1.38 acres of parkland dedication. The applicant proposes to dedicate Lot 12, Block 7 on the south side of the property to the City of Helena with Phase 1 to meet the parkland requirements for all phases. Lot 12, Block 7 is 4.49 acres. The applicant also proposes 1,007-ft of trail construction within Open Space lot 18, Block 3.

Roads

- One road will be extended with Phase 3, Lee Drive, and one road will be constructed, Brakeman Avenue/Brakeman Court. These internal roads, constructed as part of Phase 3, will follow the emergency access road alignment installed as part of Phase 1.
- Park Drive will be upgraded as part of Phase 3. The portion of Park Drive along the subdivision boundary, which is approximately from Woodward Avenue to Stuart Street, will be upgraded to full City local road standards and include pavement, curb and gutter, boulevards, and sidewalks. The portion of Park Drive not directly adjacent to the subdivision boundary will be improved to the City local road width and be paved only.

Water

- The water distribution system for Phase 3 will involve extending mains on Lee Drive (tie into Phase 1 dead end) and north at the Brakeman Court cul-de-sac (tie into Phase 2 dead end). These mains will be extended to the south along Brakeman Avenue to Park Drive. The main will further extend south along Park



Drive until a connection with the existing water main on Woodward Avenue is made. There will be six fire hydrants installed as part of Phase 3.

- No off-site improvements are required for Phase 3 of the water distribution system.

Sanitary Sewer

- Sanitary sewer for Phase 3 will tie into the existing manhole on the south end of Lee Drive that was installed as part of Phase 1. The sewer main will be extended along the full length of Lee Drive to the intersection with Brakeman Avenue. A short portion of sewer main will be installed north on Brakeman Court to collect waste flows from lots adjacent to the cul-de-sac. The sewer main will be extended to the south for the full length of Brakeman Avenue to the intersection with Park Drive. An additional extension south along Park Drive from Brakeman Avenue to an existing manhole at the intersection of Park Drive and Woodward Avenue.
- No off-site improvements are required for Phase 3 of the sanitary sewer system.

Stormwater

- Stormwater improvements for Phase 3 will consist of installing inlets and buried conveyance pipes to route stormwater collected on the north end of Brakeman Avenue and Brakeman Court to the existing drainage on the east side of the property, upstream of Pond B. Additional inlets and buried conveyance pipe will be installed on the south end of Brakeman Avenue at a vertical curve sag location to convey stormwater to the existing drainage on the east side of the property. Inlets would be installed at the future Flowerree Court location proposed for Phase 4 and buried pipe would be installed along Park Drive to the north to tie into the stormwater at Brakeman Avenue. Although not necessary for Phase 3, this stormwater will be installed to reduce the need to install the pipe within the footprint of the newly upgraded portion of Park Drive.
- No off-site improvements are required for Phase 3 of the stormwater system.

Phase 4:

- Phase 4 includes 11 single-family residential lots, and 1 multi-family lot with 32 condo units. Phase 4 is located on the south side of the subject property and will have direct access from Park Drive.
- Phase 4 will be final platted by December 2029.

Parkland Dedication

- Per the parkland dedication calculations found in Tab 2t, Phase 4 requires 0.38 acres of parkland dedication. The applicant proposes to dedicate Lot 12, Block 7 on the south side of the property to the City of Helena with Phase 1 to meet the parkland requirements for all phases. Lot 12, Block 7 is 4.49 acres.



Roads

- 1 public road will be constructed with Phase 4, Flowerree Court, and one private road will be constructed to access the multi-family lot, an extension of Flowerree Court.

Water

- The water distribution network for Phase 4 will involve connecting to the water main along Park Drive, installed as part of Phase 3, and extending the water up Flowerree Court through the end of the cul-de-sac to the private road hammerhead. At the end of the hammerhead the water main will turn to the northeast and connect back to the water main near the intersection of Brakeman Avenue and Lee Drive to provide a looped connection. Three fire hydrants will be installed as part of Phase 4.
- No off-site improvements are required for Phase 4 of the water distribution system.

Sanitary Sewer

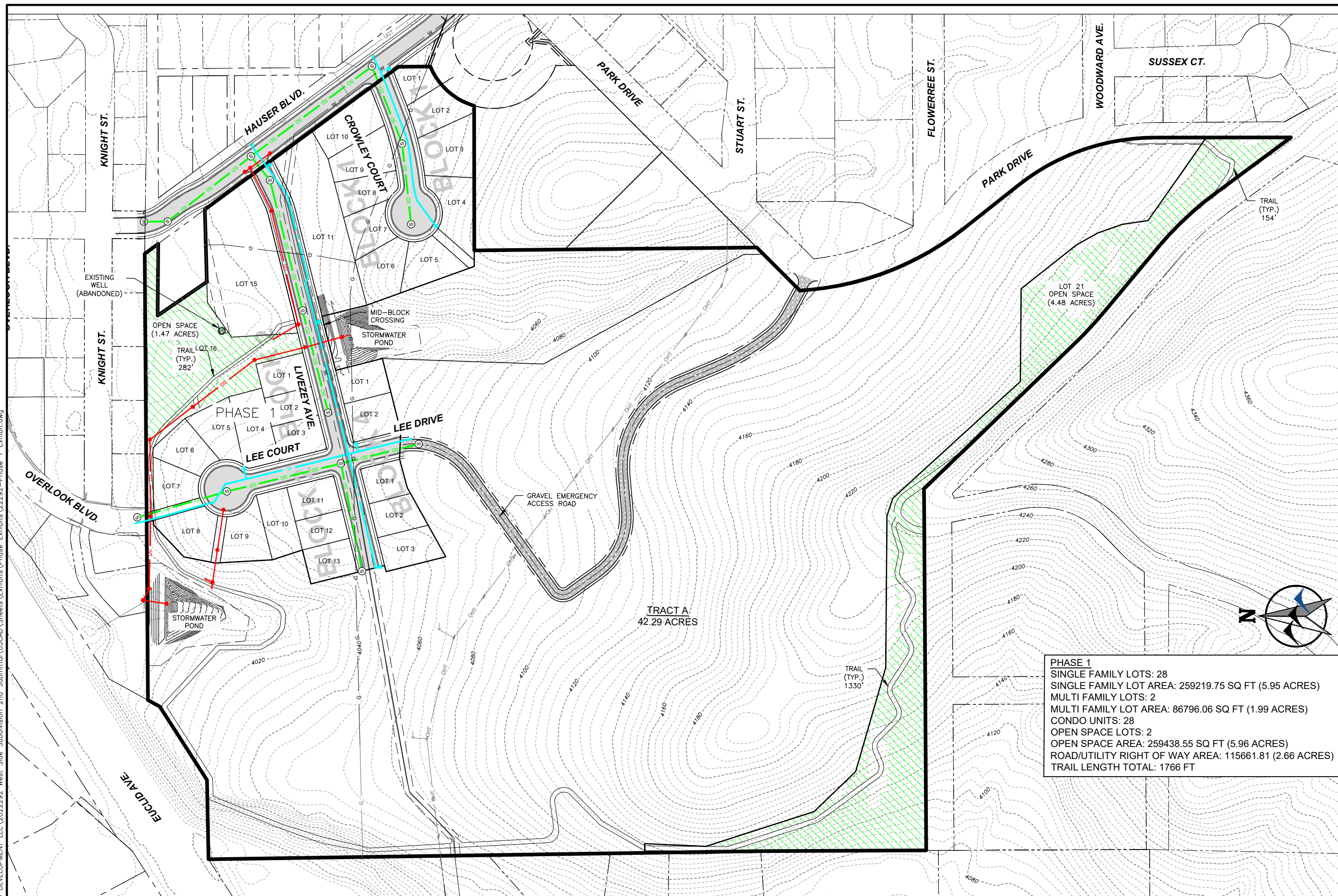
- The sanitary sewer collection system for Phase 4 will involve installing the collection main within the full extents of Flowerree Court, both the public and private road portion to the end of the hammerhead turnaround. All the waste flows will be conveyed to the collection main in Park Drive that was installed as part of Phase 3.
- No off-site improvements are required for Phase 4 of the sanitary sewer system.

Stormwater

- Stormwater improvements for Phase 4 will involve installing inlets and a short, buried pipe at the intersection of Flowerree Court and Park Drive to connect to the previously installed stormwater as part of Phase 3. To collect stormwater runoff from the private condo lot, a conveyance ditch will be installed along the westerly and northerly perimeter of the private lot. A new inlet and buried pipe will be installed to receive the stormwater from the ditch and convey the flows to existing stormwater infrastructure at the intersection Brakeman Avenue and Lee Drive.
- No off-site improvements are required for Phase 4 of the stormwater system.

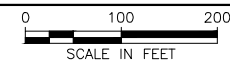


K:\Helena\ECO DEVELOPMENT LLC\2022292 West Side Subdivision 2nd Submittal\05CAD\Sheets\Exhibits\Phase Exhibits\22292-Phase 1 Exhibit.dwg



PHASE 1
 SINGLE FAMILY LOTS: 28
 SINGLE FAMILY LOT AREA: 259219.75 SQ FT (5.95 ACRES)
 MULTI FAMILY LOTS: 2
 MULTI FAMILY LOT AREA: 86796.06 SQ FT (1.99 ACRES)
 CONDO UNITS: 28
 OPEN SPACE LOTS: 2
 OPEN SPACE AREA: 259438.55 SQ FT (5.96 ACRES)
 ROAD/UTILITY RIGHT OF WAY AREA: 115661.81 (2.66 ACRES)
 TRAIL LENGTH TOTAL: 1766 FT

PLAN VIEW OF PHASE 1



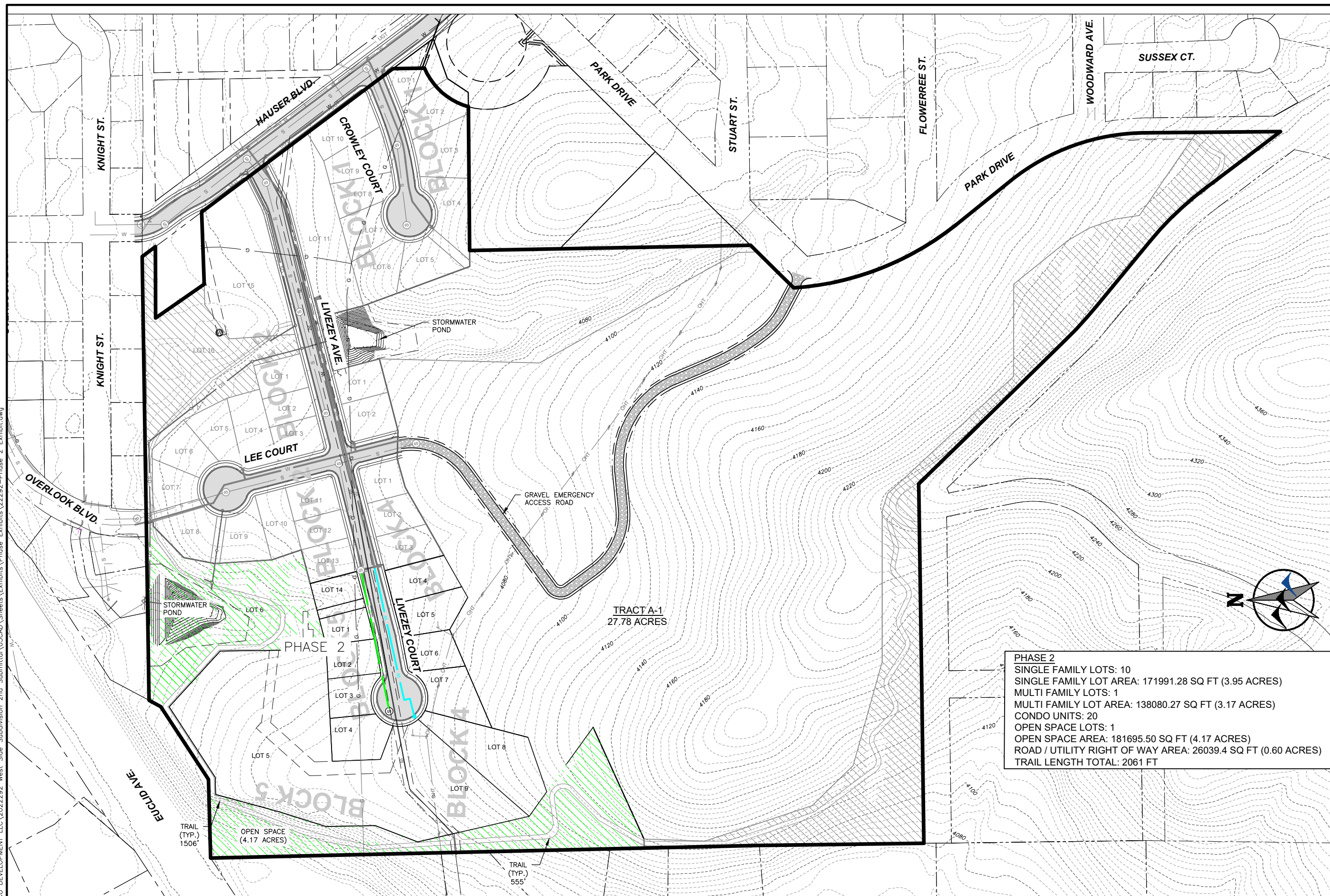
| NO. | REVISION DESCRIPTION | BY | DATE |
|-----|----------------------|----|------|
| | | | |
| | | | |
| | | | |
| | | | |

| |
|-----------------------|
| PROJECT: 2022-292 |
| DESIGNED: JMF |
| DRAWN: DCT |
| CHECKED: DDP |
| APPROVED: JMF |
| DATE: AUGUST 17, 2022 |

WVC
 ENGINEERING
 1275 MAPLE STREET, SUITE F
 HELENA, MT 59601
 (406) 443-3962

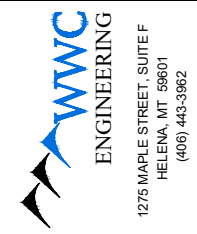
ECO DEVELOPMENT, LLC
WEST SIDE WOODS MAJOR SUBDIVISION
 PHASE 1 PROPOSED SITE PLAN

K:\Helena\ECO DEVELOPMENT LLC\2022292 West Side Subdivision 2nd Submittal\05CAD\Sheets\Exhibits\Phase Exhibits\22292-Phase 2 Exhibit.dwg

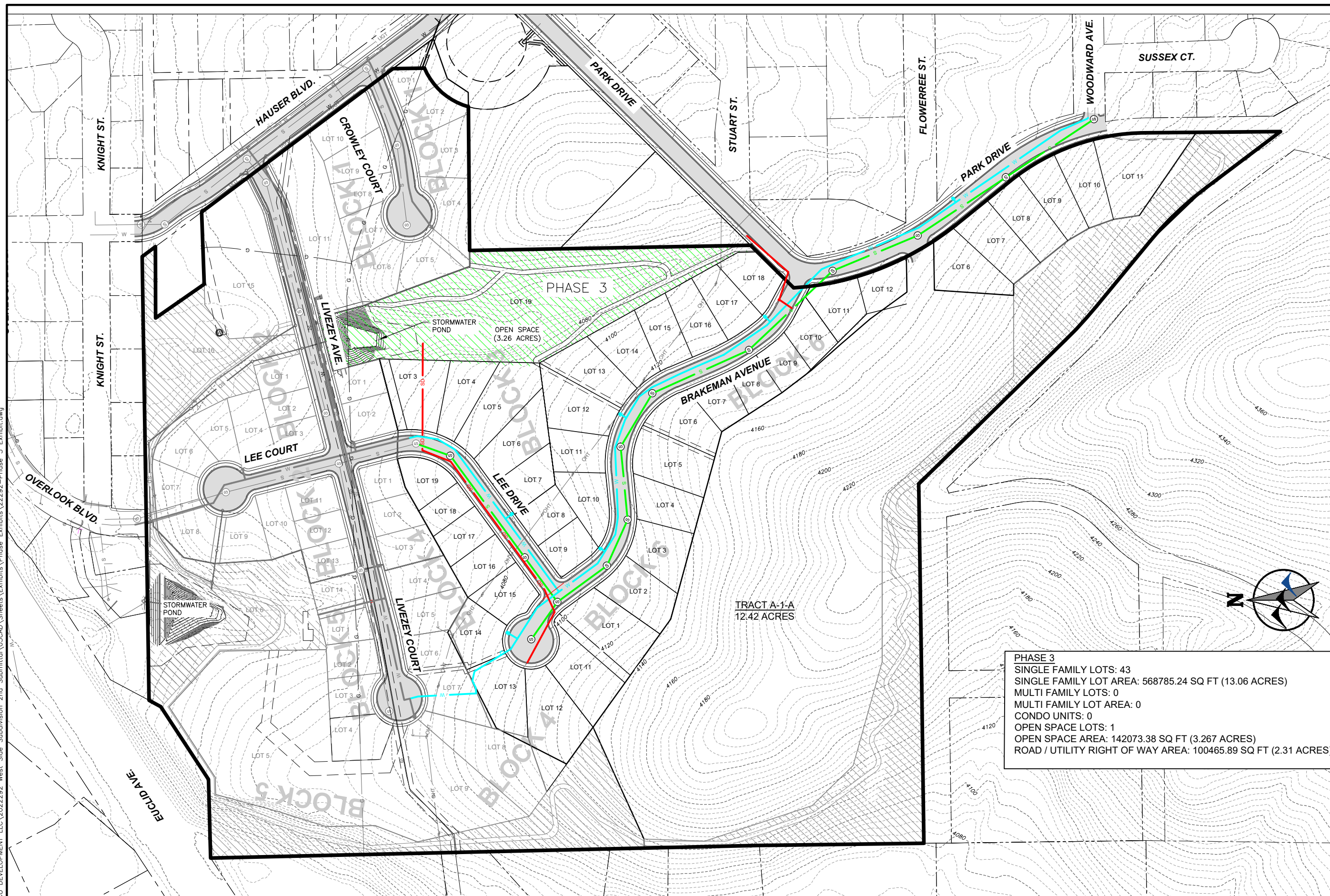


PLAN VIEW OF PHASE 2
 0 100 200
 SCALE IN FEET

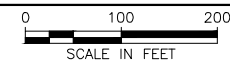
PHASE 2
 SINGLE FAMILY LOTS: 10
 SINGLE FAMILY LOT AREA: 171991.28 SQ FT (3.95 ACRES)
 MULTI FAMILY LOTS: 1
 MULTI FAMILY LOT AREA: 138080.27 SQ FT (3.17 ACRES)
 CONDO UNITS: 20
 OPEN SPACE LOTS: 1
 OPEN SPACE AREA: 181695.50 SQ FT (4.17 ACRES)
 ROAD / UTILITY RIGHT OF WAY AREA: 26039.4 SQ FT (0.60 ACRES)
 TRAIL LENGTH TOTAL: 2061 FT

| | | | | | |
|--|---|-----|----------------------|----|------|
| PROJECT: 2022-292 | | NO. | REVISION DESCRIPTION | BY | DATE |
| DESIGNED: JMF | △ | | | | |
| DRAWN: DCT | △ | | | | |
| CHECKED: DDP | △ | | | | |
| APPROVED: JMF | △ | | | | |
| DATE: AUGUST 17, 2022 | △ | | | | |
|  WVC ENGINEERING 1275 MAPLE STREET, SUITE F HELENA, MT 59601 (406) 443-9862 | | | | | |
| ECO DEVELOPMENT, LLC WEST SIDE WOODS MAJOR SUBDIVISION PHASE 2 PROPOSED SITE PLAN | | | | | |
| SHEET NO. 2 OF 4 | | | | | |

K:\Helena\ECO DEVELOPMENT LLC\2022292 West Side Subdivision 2nd Submittal\05CAD\Sheets\Exhibits\Phase Exhibits\22292-Phase 3 Exhibit.dwg



PLAN VIEW OF PHASE 3



PHASE 3
 SINGLE FAMILY LOTS: 43
 SINGLE FAMILY LOT AREA: 568785.24 SQ FT (13.06 ACRES)
 MULTI FAMILY LOTS: 0
 MULTI FAMILY LOT AREA: 0
 CONDO UNITS: 0
 OPEN SPACE LOTS: 1
 OPEN SPACE AREA: 142073.38 SQ FT (3.267 ACRES)
 ROAD / UTILITY RIGHT OF WAY AREA: 100465.89 SQ FT (2.31 ACRES)

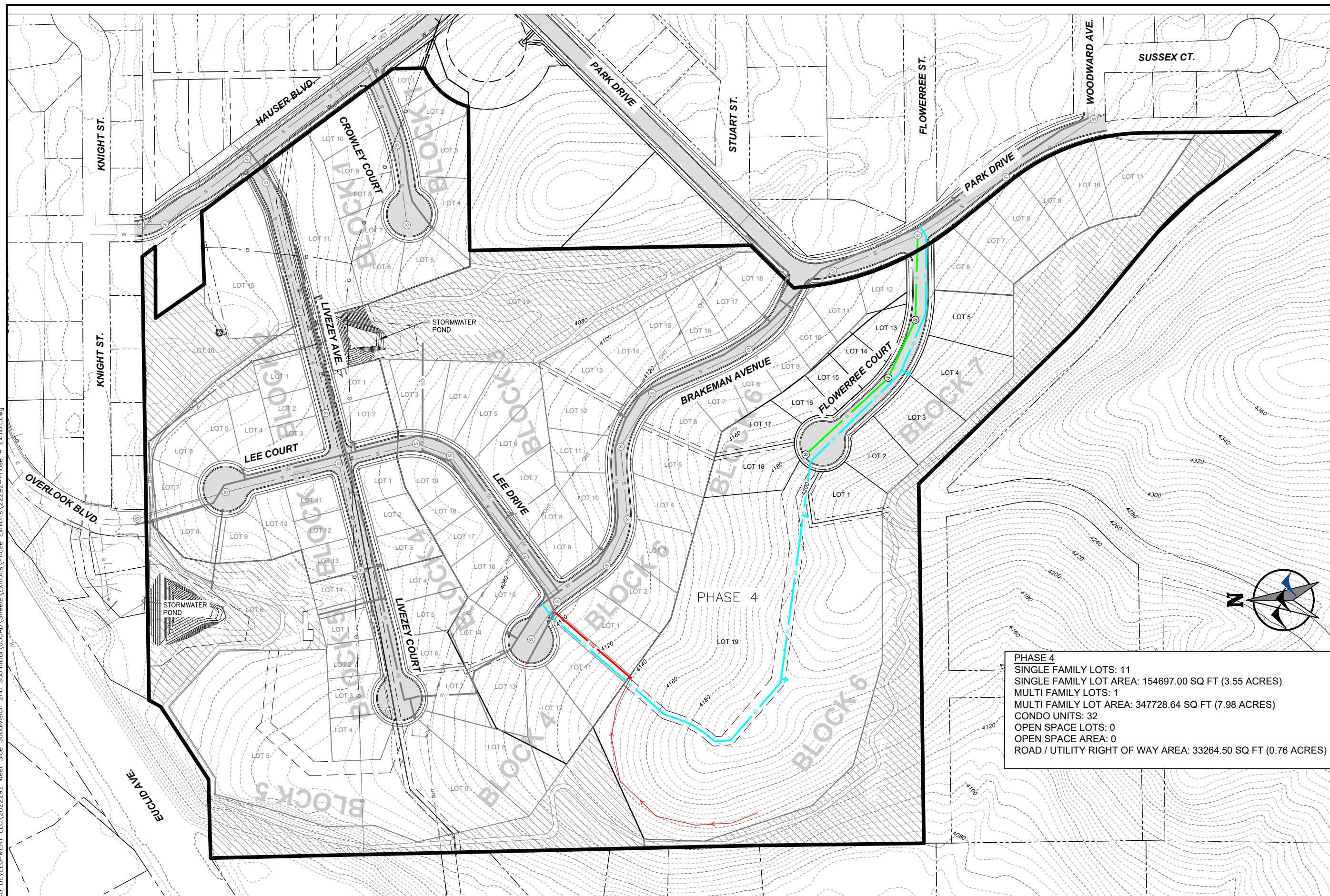
| NO. | REVISION DESCRIPTION | BY | DATE |
|-----|----------------------|----|------|
| | | | |
| | | | |
| | | | |
| | | | |

PROJECT: 2022-292
 DESIGNED: JMF
 DRAWN: DCT
 CHECKED: DDP
 APPROVED: JMF
 DATE: AUGUST 17, 2022

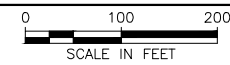


ECO DEVELOPMENT, LLC
WEST SIDE WOODS MAJOR SUBDIVISION
 PHASE 3 PROPOSED SITE PLAN

K:\Helena\ECO DEVELOPMENT LLC\2022292 West Side Subdivision 2nd Submittal\05CAD\Sheets\Exhibits\Phase Exhibits\22292-Phase 4 Exhibit.dwg



PLAN VIEW OF PHASE 4



PHASE 4
 SINGLE FAMILY LOTS: 11
 SINGLE FAMILY LOT AREA: 154697.00 SQ FT (3.55 ACRES)
 MULTI FAMILY LOTS: 1
 MULTI FAMILY LOT AREA: 347728.64 SQ FT (7.98 ACRES)
 CONDO UNITS: 32
 OPEN SPACE LOTS: 0
 OPEN SPACE AREA: 0
 ROAD / UTILITY RIGHT OF WAY AREA: 33264.50 SQ FT (0.76 ACRES)

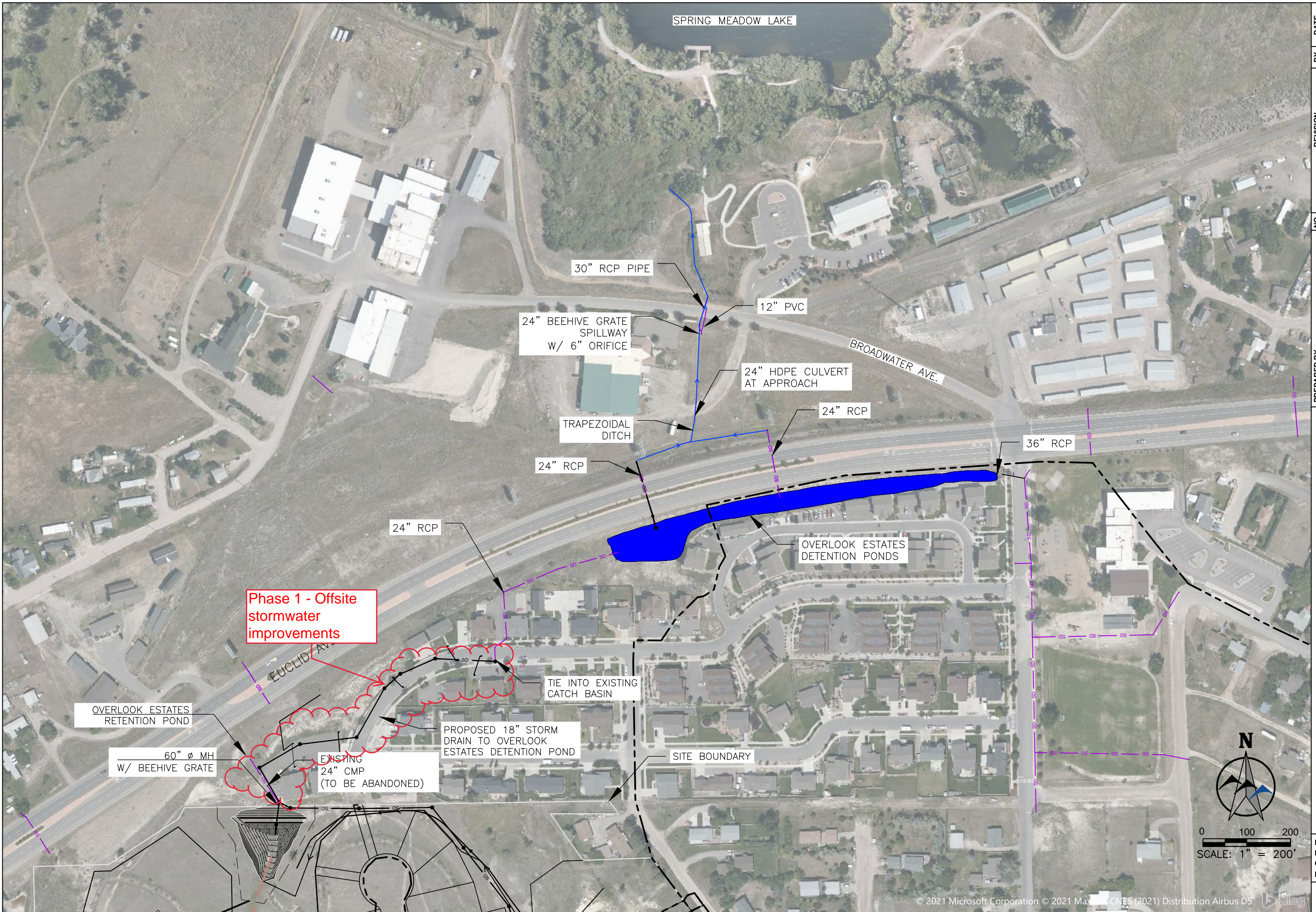
| | | | | | |
|-----------------------|---|-----|----------------------|----|------|
| PROJECT: 2022-292 | | NO. | REVISION DESCRIPTION | BY | DATE |
| DESIGNED: JMF | △ | | | | |
| DRAWN: DCT | △ | | | | |
| CHECKED: DDP | △ | | | | |
| APPROVED: JMF | △ | | | | |
| DATE: AUGUST 17, 2022 | | | | | |

WWC ENGINEERING
 1275 MAPLE STREET, SUITE F
 HELENA, MT 59601
 (406) 443-9962

ECO DEVELOPMENT, LLC
WEST SIDE WOODS MAJOR SUBDIVISION
 PHASE 4 PROPOSED SITE PLAN

SHEET NO.
4
 OF 4

K:\Helena\ECO DEVELOPMENT, LLC\20222392 West Side Subdivision 2nd Submittal\06CAD\Sheets\Exhibits\PropPlan\2(4) - EXHIB-STRM EXIT.dwg Downstream Storm 8/16/2022 1:04:43 PM



Phase 1 - Offsite stormwater improvements

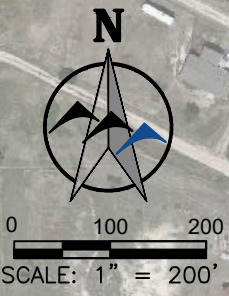
| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

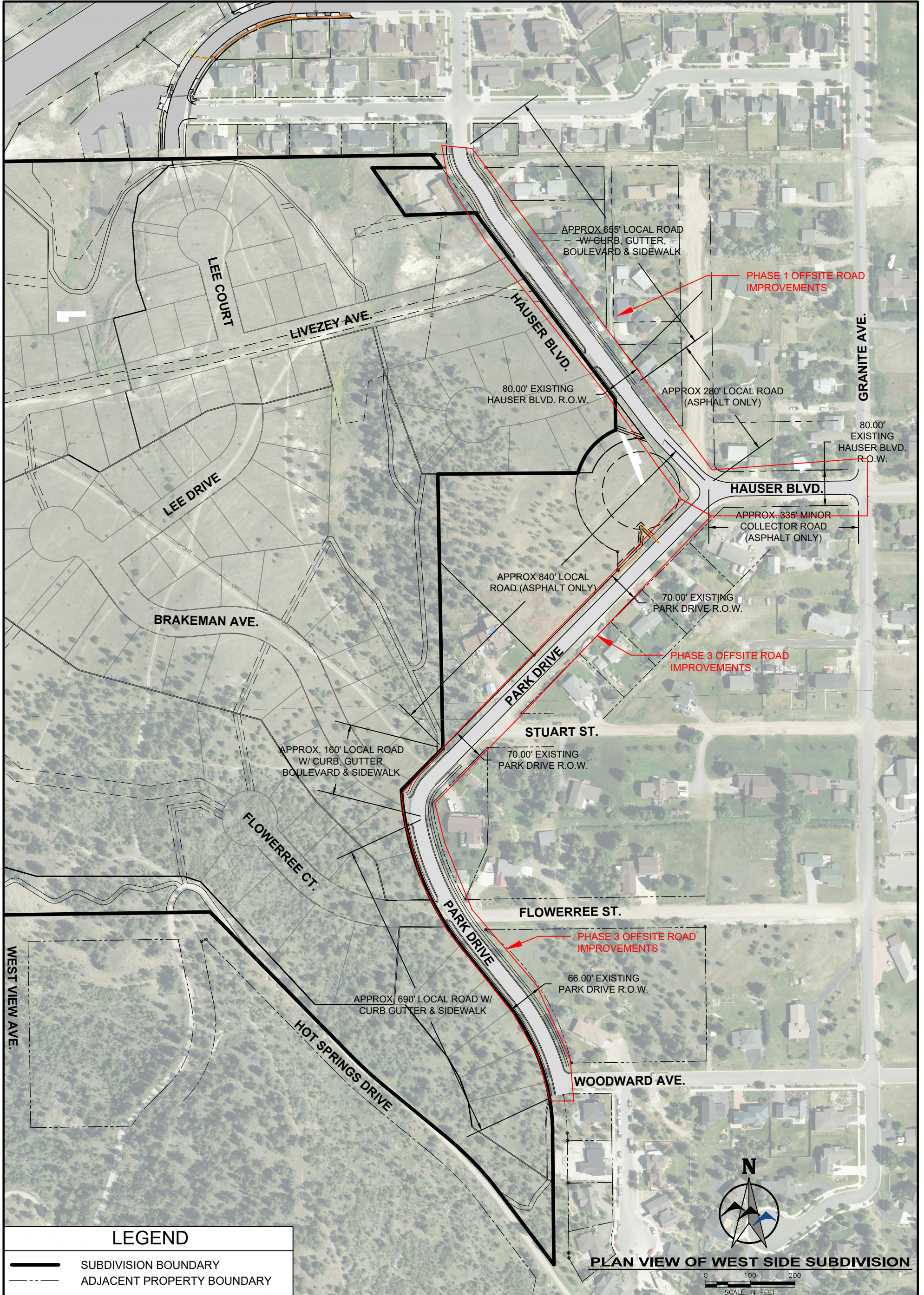
PREPARED BY
WWC ENGINEERING
 1275 MAPLE STREET, SUITE F
 HELENA, MT 59601
 (406) 443-3962
 www.wwcengineering.com

ECO DEVELOPMENT, LLC.
WEST SIDE WOODS MAJOR SUBDIVISION
DOWNSTREAM HYDRAULIC CONNECTIONS
 LEWIS & CLARK COUNTY, MONTANA

DESIGNED BY: DSD
 DRAWN BY: DSD
 CHECKED BY: STH
 DATE: 8/2022

SHEET
8





LEGEND

- SUBDIVISION BOUNDARY
- ADJACENT PROPERTY BOUNDARY

ECO DEVELOPMENT, LLC

WEST SIDE WOODS MAJOR SUBDIVISION

OFFSITE ROAD IMPROVEMENTS

ENGINEERING
 1275 MAPLE STREET, SUITE F
 HELENA, MT 59601
 (406) 443-3962

| | |
|--------------------------|---|
| PROJECT: 2022-292 | |
| DESIGNED: JMF | △ |
| DRAWN: DLC | △ |
| CHECKED: DDP | △ |
| APPROVED: JMF | △ |
| DATE: SEPTEMBER 16, 2022 | △ |