

PROJECT DATA

PROPERTY: THE SITE IS AN UNDEVELOPED COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP K-10. THE SITE IS BOUND TO THE EAST BY UNSER BLVD. TO THE NORTH AND WEST BY DEVELOPED COMMERCIAL PROPERTY AND SARRACINO PL NW AND TO THE SOUTH BY CENTRAL AVE.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE FARMERS MARKET OPEN PAVILIONS, OFFICE SPACE, APARTMENTS 4 STORIES, RETAIL/RESTAURANTS, PARKING, AND LANDSCAPING.

LEGAL: A PORTION OF TRACT B1 WEST ROUTE 66 ADDITION II, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY MONUMENT "9-K10", ELEVATION = 5117.72 FEET (NAVD 1988).

OFF-SITE FLOW: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP 35001C0328J, MAP (REVISION DATE NOVEMBER 4, 2016), THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN. A PORTION OF THE ADJACENT STREET, CENTRAL AVENUE, IS ENCUMBERED BY ZONE AO (DEPTH 1').

DRAINAGE PLAN CONCEPT: PER THE UNSER BOULEVARD RECONSTRUCTION DRAINAGE REPORT (COA HYDROLOGY FILE K10/D057), BY HUITT-ZOLLARS DATED APRIL 2017, THIS PROPERTY FALLS WITHIN DRAINAGE BASIN 130.3. THE OVERALL BASIN IS SIZED AT 18 ACRES WITH A CALCULATED DISCHARGE OF 60.77 CFS (3.45 CFS/ACRE). NEW OFF-SITE ROAD AND STORM DRAIN IMPROVEMENTS (CITY PROJECT NO. 4383.91) WILL BE CONSTRUCTED WHICH INCLUDES STORM DRAIN ACCESS TO AN EXISTING 48" STORM DRAIN PROVIDED FOR THIS BASIN (PASSING FLOW UNDER CENTRAL AVENUE).

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KEYED NOTES

SEE SHEET CG-102 FOR KEYED NOTES REFERENCED ON THIS PLAN

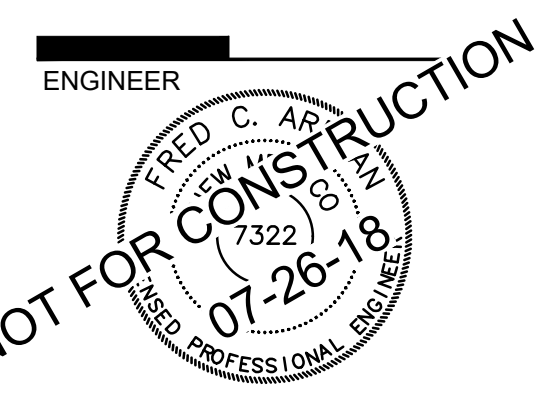
LEGEND

• 5105.65'	EXISTING SPOT ELEVATION
-5110-	EXISTING CONTOUR
-12-	PROPOSED CONTOUR (1' INCREMENT)
08.9	PROPOSED SPOT ELEVATION
→	FLOW ARROW
[Hatched Box]	FIRST FLUSH RETENTION POND OPTION

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ENGINEER

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ALBUQUERQUE, NM**

REVISIONS

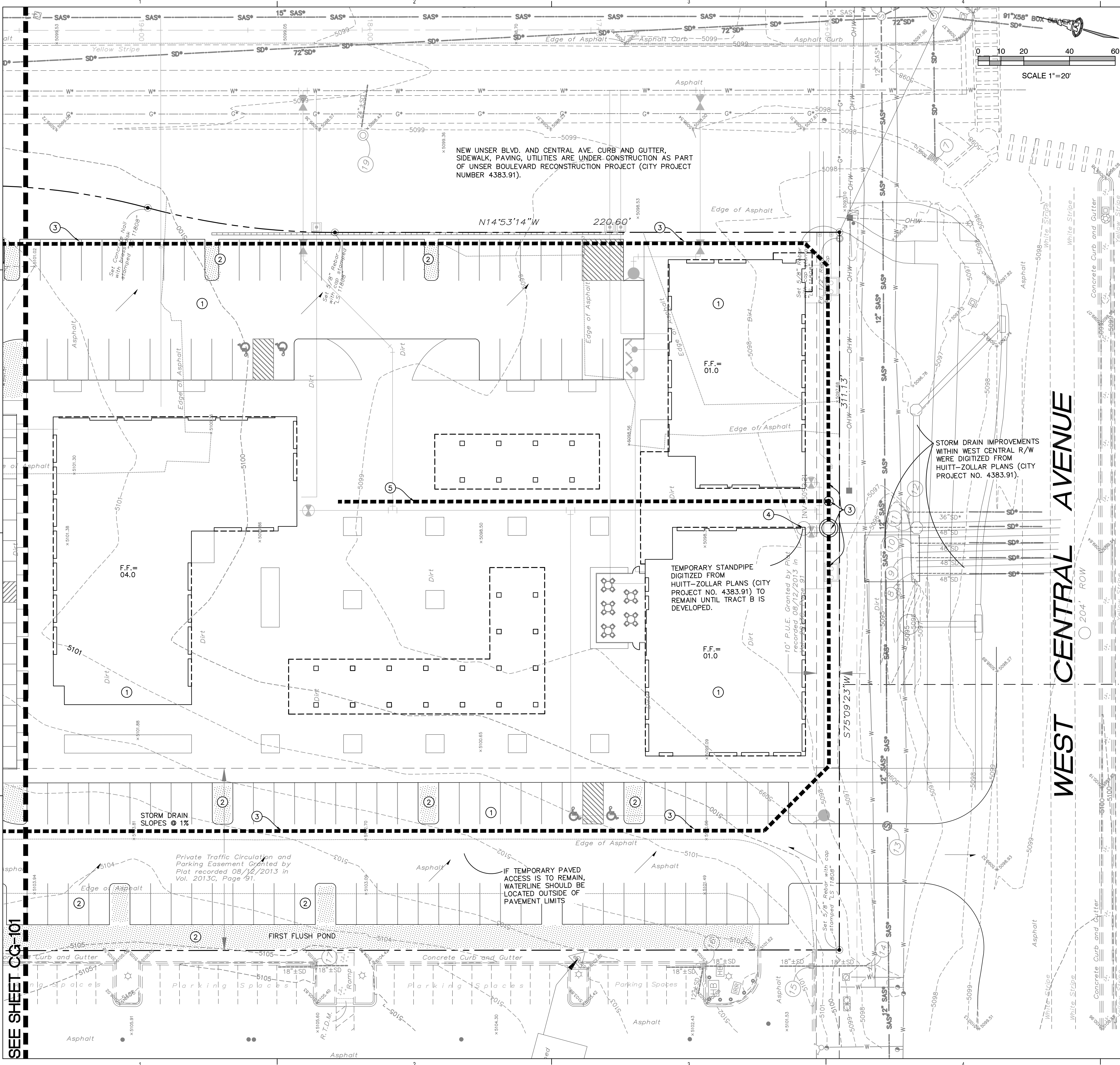
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DRAWN BY: BJB
REVIEWED BY: FCA
DATE: 6/18/2018
PROJECT NO.: 17-0153
DRAWING NAME:

CONCEPTUAL
GRADING AND
DRAINAGE PLAN
1 OF 2

SHEET NO.
CG-101
OF

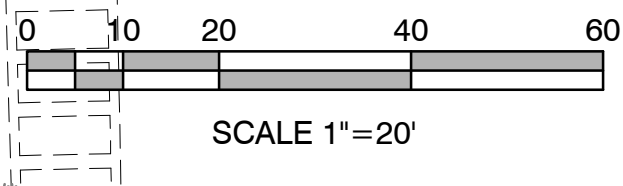
SEE SHEET CG-102



SEE SHEET CG-101

KEYED NOTES

1. IMPERVIOUS AREA WILL BE DIRECTED THROUGH STORMWATER QUALITY FIRST FLUSH RETENTION PONDS BEFORE DISCHARGING TO THE PUBLIC STORM DRAIN SYSTEM (AS POSSIBLE). SEE CG-501 FOR ADDITIONAL INFORMATION / CALCULATIONS FOR EACH TRACT AND REQUIREMENTS FOR PAYMENT IN-LIEU FOR ANY IMPERVIOUS AREA VOLUME THAT DOES NOT MEET THE STORMWATER QUALITY FIRST FLUSH REQUIREMENTS.
2. STORMWATER QUALITY FIRST FLUSH RETENTION POND OPTION. FIRST FLUSH PONDS WILL BE FINALIZED AS PART OF THE BUILDING PERMIT PLANS FOR EACH TRACT.
3. PROPOSED PRIVATE STORM DRAIN SYSTEM CONNECTED TO EXISTING 48" STORM DRAIN PIPE (TO BE CONSTRUCTED AS PART OF TRACT A DEVELOPMENT).
4. EXISTING (TEMPORARY) STORM DRAIN STANDPIPE CONSTRUCTED AS PART OF UNSER BOULEVARD RECONSTRUCTION PROJECT (CITY PROJECT NUMBER 4383.91). THIS WILL REMAIN IN OPERATION FOR TRACT B (UNDEVELOPED) UNTIL TRACT B DEVELOPS.
5. PROPOSED PRIVATE STORM DRAIN SYSTEM CONNECTED TO EXISTING 48" STORM DRAIN PIPE (TO BE CONSTRUCTED AS PART OF TRACT B DEVELOPMENT).
6. PROPOSED TRACT A DETENTION POND REQUIRED TO RESTRICT TOTAL DISCHARGE FROM TRACT A. SEE CG-501 AND SUPPLEMENTAL INFORMATION.



LEGEND

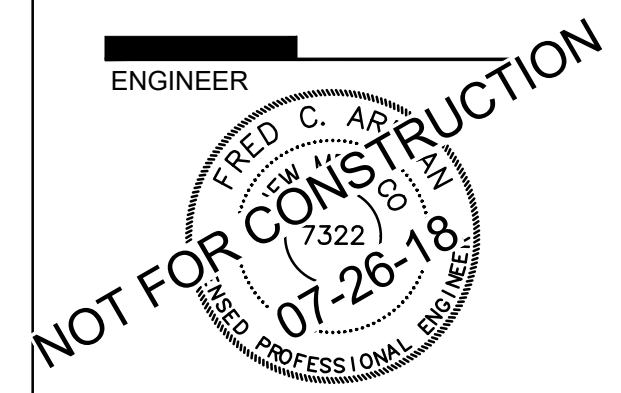
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- 08.9 PROPOSED SPOT ELEVATION
- FLOW ARROW
- [Hatched Box] PROPOSED FIRST FLUSH RETENTION POND

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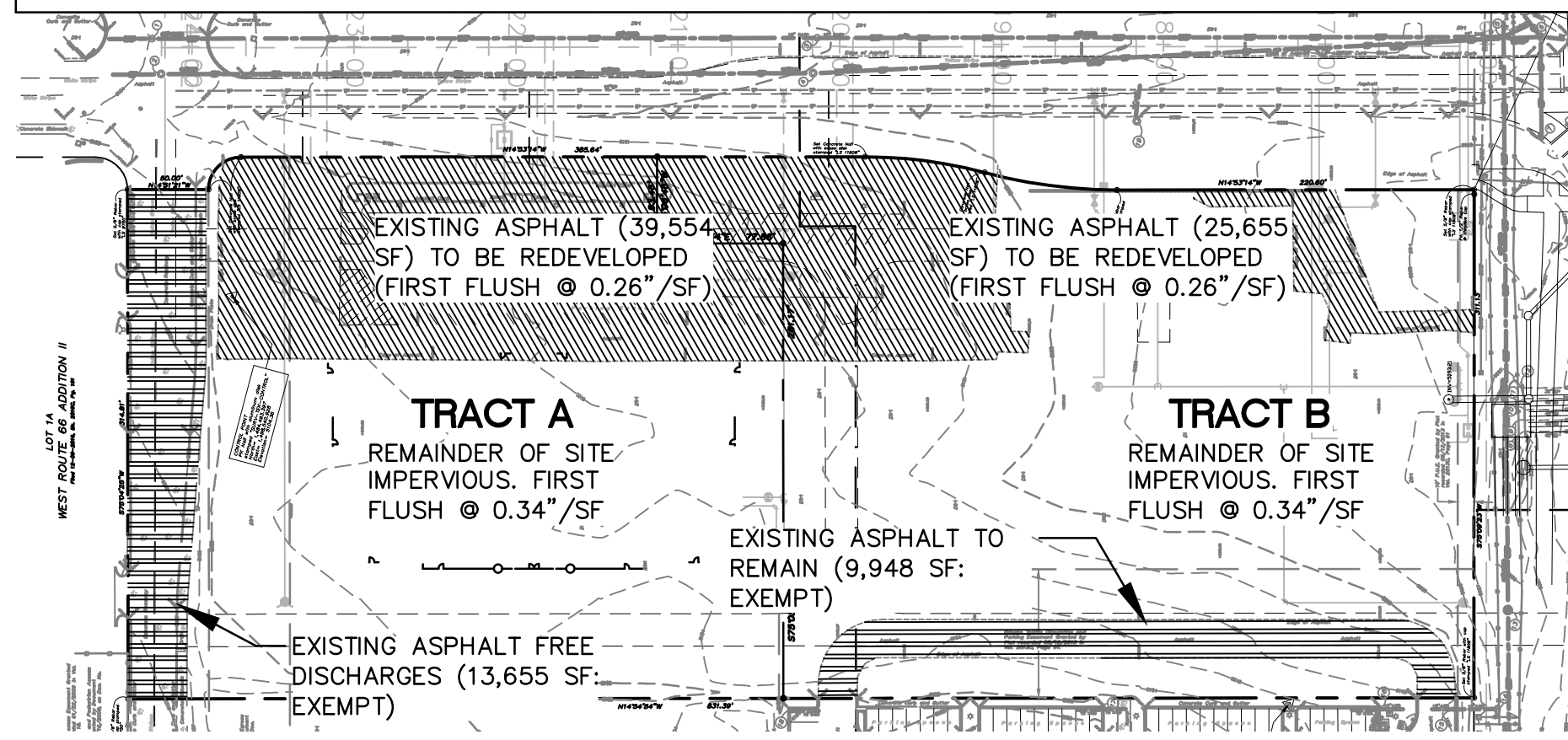
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CONCEPTUAL
GRADING AND
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2 OF 2

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SHEET NO.
CG-102
OF

EXISTING IMPERVIOUS AREA



STORMWATER QUALITY CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (FFL: DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

TRACT A:

THE ESTIMATED IMPERVIOUS AREA FOR TRACT A IS 80% OF TOTAL AREA. $(0.80 * 130,257) = 104,206$ SF.
 EXISTING ASPHALT TO REMAIN CONSISTS OF THE ACCESS ROAD ON THE NORTH END OF THE SITE (13,655 SF). THIS IS EXEMPT FROM FFL REQUIREMENT REDUCING THE FFL IMPERVIOUS AREA TO $104,206 - 13,655 = 90,551$ SF.
 EXISTING ASPHALT THAT IS BEING REDEVELOPED (REMOVED/REPLACED) IS SUBJECT TO A REDUCED RATE OF 0.26"/SF.
 THE EXISTING NE ASPHALT PAVED PARKING WITHIN TRACT A IS 39,554 SF. FFL RETENTION PONDING VOLUME REQUIRED FOR THIS AREA = $0.26" * \text{TYPE 'D' AREA: } 0.26/12 * (39,554 \text{ SF}) = 857$ CF.
 FFL RETENTION PONDING VOLUME REQUIRED FOR THE REMAINING AREA $(90,551 - 39,554) = 50,997$ SF @ $0.34" * \text{TYPE 'D' AREA: } 0.34/12 * (50,997 \text{ SF}) = 1,445$ CF
 TOTAL FFL RETENTION FOR TRACT A = $857 + 1,445 = 2,302$ CF.

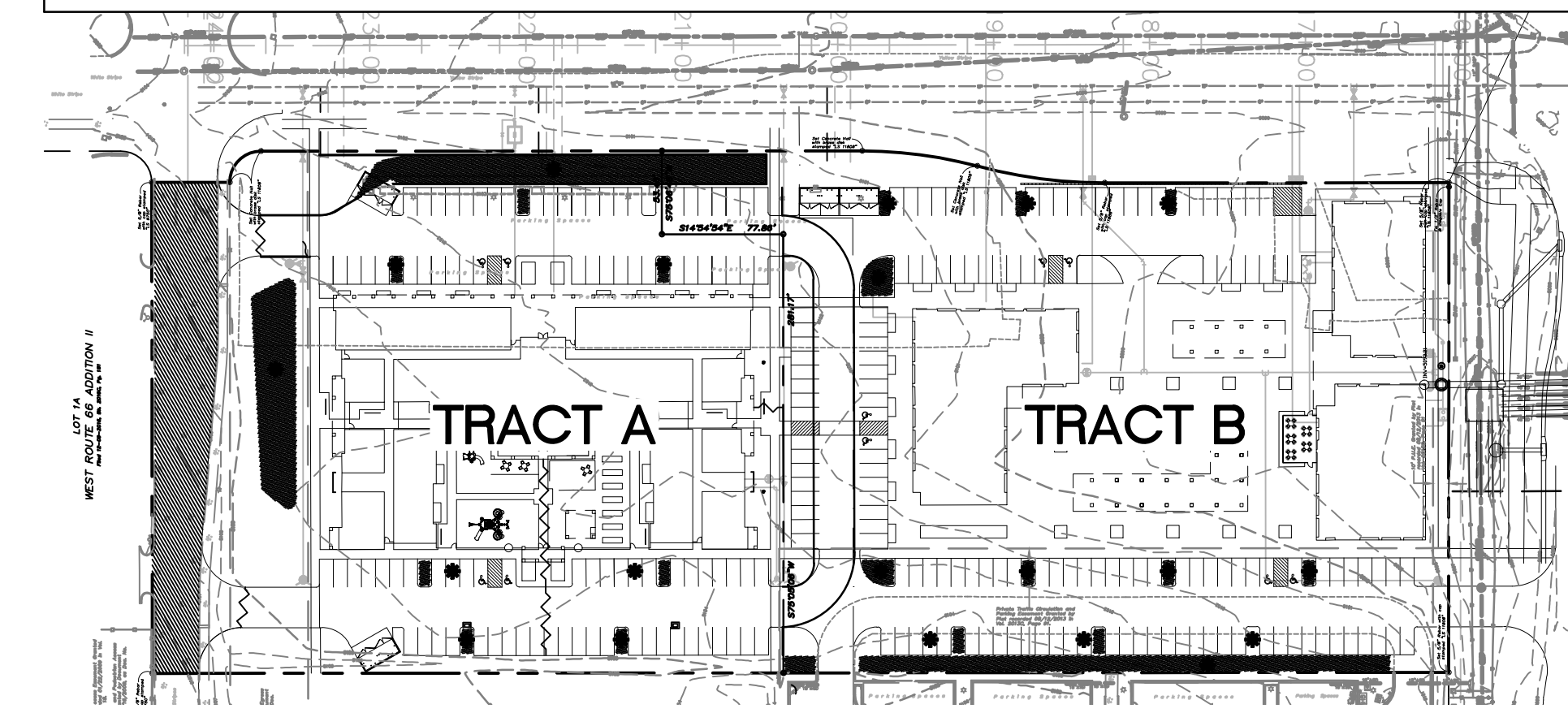
FFL RETENTION PONDS WILL BE CONSTRUCTED AS POSSIBLE. FINAL LOCATIONS AND DESIGN WILL BE PROVIDED AS PART OF BUILDING PERMIT CONSTRUCTION DOCUMENTS. HATCHED AREAS ARE SHOWN TO INDICATE POSSIBLE POND LOCATIONS. A PRIVATE FACILITY DRAINAGE COVENANT WILL BE PROVIDED FOR THE FIRST FLUSH PONDS.

TRACT B:

THE ESTIMATED IMPERVIOUS AREA FOR TRACT B IS 85% OF TOTAL AREA. $(0.85 * 140,764) = 119,650$ SF.
 EXISTING ASPHALT TO REMAIN CONSISTS OF THE EXISTING ASPHALT DRIVE CONSTRUCTED AS PART OF THE ADJACENT LIBRARY IMPROVEMENTS, WITHIN A SHARED EASEMENT (9,948 SF). THIS IS EXEMPT FROM FFL REQUIREMENT REDUCING THE FFL IMPERVIOUS AREA TO $119,650 - 9,948 = 109,702$ SF.
 EXISTING ASPHALT THAT IS BEING REDEVELOPED (REMOVED/REPLACED) IS SUBJECT TO A REDUCED RATE OF 0.26"/SF.
 THE EXISTING ASPHALT PAVED PARKING WITHIN TRACT B IS 25,655 SF. FFL RETENTION PONDING VOLUME REQUIRED FOR THIS AREA = $0.26" * \text{TYPE 'D' AREA: } 0.26/12 * (25,655 \text{ SF}) = 556$ CF.
 FFL RETENTION PONDING VOLUME REQUIRED FOR THE REMAINING AREA $(109,702 - 25,655) = 84,047$ SF @ $0.34" * \text{TYPE 'D' AREA: } 0.34/12 * (84,047 \text{ SF}) = 2,381$ CF
 TOTAL FFL RETENTION FOR TRACT A = $556 + 2,381 = 2,937$ CF.

FFL RETENTION PONDS WILL BE CONSTRUCTED AS POSSIBLE. FINAL LOCATIONS AND DESIGN WILL BE PROVIDED AS PART OF BUILDING PERMIT CONSTRUCTION DOCUMENTS. HATCHED AREAS ARE SHOWN TO INDICATE POSSIBLE POND LOCATIONS. A PRIVATE FACILITY DRAINAGE COVENANT WILL BE PROVIDED FOR THE FIRST FLUSH PONDS.

*** FIRST FLUSH RETENTION POND OPTIONS**



STORMWATER QUALITY CONTROL FIRST FLUSH POND OPTIONS ARE AVAILABLE ON BOTH TRACTS A AND B. TOTAL STORMWATER QUALITY POND VOLUMES ARE ANALYZED / CALCULATED AT LEFT.

FIRST FLUSH PONDS WILL BE FINALIZED AS PART OF THE BUILDING PERMIT PLANS FOR EACH TRACT.

PRIOR TO BUILDING PERMIT APPROVAL, A "PAYMENT IN-LIEU FOR STORM WATER QUALITY VOLUME REQUIREMENT" TREASURY DEPOSIT SLIP WILL BE PROVIDED BY C.O.A. HYDROLOGY. THIS WILL BE BASED ON THE PORTION OF FIRST FLUSH VOLUME (\$8.00 PER CF) THAT IS NOT RETAINED ON-SITE. A COPY OF THE PAID RECEIPT WILL BE REQUIRED PRIOR TO BUILDING PERMIT APPROVAL.

A DRAINAGE COVENANT IS REQUIRED FOR THE STORMWATER QUALITY FIRST FLUSH PONDS AND FOR THE DETENTION POND(S) AND THEIR OUTFALL STRUCTURES. THE ORIGINAL NOTARIZED FORM, EXHIBIT A (LEGIBLE ON 8.5X11 AND RECORDING FEE (\$25, PAYABLE TO CITY OF ALBUQUERQUE) MUST BE TURNED INTO DRC (4TH, PLAZA DEL SOL) FOR ROUTING. PLEASE CONTACT CHARLOTTE LABADIE (CLABADIE@CABQ.GOV, 924-3996) OR MADELINE CARRUTHERS (MTAF0YA@CABQ.GOV, 924-3997) REGARDING THE ROUTING AND RECORDING PROCESS FOR COVENANTS.

ALLOWABLE DISCHARGE

PER THE UNSER BOULEVARD RECONSTRUCTION DRAINAGE REPORT (COA HYDROLOGY FILE K10/D057 DATED APRIL 2017) BY HUITT-ZOLLARS, WEST ROUTE 66 ADDITION II, TRACTS A AND B FALL WITHIN DRAINAGE BASIN 13D.3 WHICH HAS AN ALLOWABLE RELEASE RATE OF 3.45 CFS / ACRE.

TRACT A (2.9903 AC) + TRACT B (3.2315 AC) TOTAL 6.2218 ACRES. AT 3.45 CFS/ACRE, THE PROPERTY IS PERMITTED TO DISCHARGE:

$3.45 * 6.2218 = 21.47$ CFS TOTAL ALLOWABLE DISCHARGE FROM TRACT A + TRACT B
 TRACT B WILL BE PERMITTED FREE DISCHARGE 13.3 CFS (BASED ON 0%A : 5%B : 10%C : 85%D).
 TRACT A WILL REQUIRE DETENTION PONDING TO LIMIT DISCHARGE TO 8.17 CFS. DISCHARGE THE EXISTING NORTH ACCESS ROAD WILL CONTINUE TO FREE DISCHARGE 1.10 CFS TO UNSER BLVD. THE REMAINDER (7.07 CFS) WILL DISCHARGE TO THE 48" DIA. STORM DRAIN PIPE PROVIDED INTO PROPERTY FROM CENTRAL BLVD.

TOTAL DISCHARGE FROM PROPERTY IS LIMITED TO 21.47 CFS:

- 13.3 CFS TRACT B
- 1.10 CFS EXISTING TRACT A ACCESS ROAD (NORTH SIDE)
- 7.07 CFS REMAINDER OF TRACT A (EXCESS TO BE DETAINED WITHIN EAST POND USING ORIFICE CONTROL STRUCTURE TO BE DESIGNED AS PART OF BUILDING PERMIT PLANS FOR TRACT A)

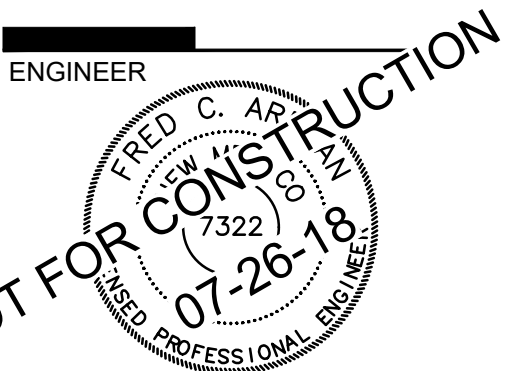
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DRAWING NAME

**GRADING AND
DRAINAGE
DETAILS AND
CALCULATIONS**

SHEET NO.

CG-501

OF

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