

Region 2 Permits 5615 Wills Blvd. Pueblo, CO 81008

September 30, 2019

SH83/Walker Rd El Paso County

Nina Ruiz, Project Manager / Planner II El Paso Planning & Community Development 2880 International Circle Colorado Springs, CO 80910

re: Monument Academy/YMCA\_SH83Walker - Aug2019\_Site Development Plan - EA18206\_PPR199 - REVISED for Hydraulic comments

## Dear Nina,

I am in receipt of a referral request for comments in regard to the subject development mentioned above. The development land usage is a multi-use development of 64.10-acres. The land usages are a middle/high school of 600 students (85,000-SF-two phases), a YMCA facility of (40,000-SF future) and 20.75-acres of commercial/residential developmental. Roadway connections are proposed to be at the intersection SH83/Walker Rd, SH83/and future interior road of Pinehurst Circle and Walker Rd./Road A. The site is located at the south east corner of the intersection at SH83 and Walker Rd. in El Paso County, Colorado. Comments from CDOT staff are as follows;

### Access comments:

- a. Access Permit for the intersection of SH83/ Walker road will be required.
- b. Access Permit will be required for the sweeping right in to the proposed Pinehurst Circle.
- c. All comments are subject to change upon review of additional information and revised Traffic Impact Studies.
- d. All roadway design criteria for the accesses to the State Highway System will need to conform to the standards and requirements of the State of Colorado, State Highway Access Code and relevant standards adopted by El Paso County.
- e. **Pinehurst Circle connection:** Discussions have taking place for vehicular access, to connect a new leg of Pinehurst Circle via various options for access to SH83. The State highway Access Code does not allow for this connection to be made. However, upon application acceptance if the newly updated study show it beneficial to the intersection of SH83/Walker Rd. then a sweeping one-way right-in connection will be allowed. This connection will be allowed approximately 1800-feet from the intersection of Walker Rd. and SH83. A new TIS will need to be submitted with more detailed information and conceptual plans for review by CDOT. Further analysis and collaboration with EPC will need to be done once the TIS is revised to reflect this connection.
- f. Right of Way donation designated as future public right of way will need to take place to preserve the ultimate configuration of the future 4 lane principle arterial roadway along the west boundary of the development.



- g. Access to the what is believed to be AT&T/US station parcel will need to be granted from the interior roadway system "Road A" and the access along SH83 is to be closed with the project Phase I. Once constructed, the access along SH83 to AT&T/Us shall be closed and the right of way established to original conditions to match existing.
- h. No left turning movements will be allowed at the proposed Pinehurst Circle connection to SH83.
- It is anticipated that El Paso County will be the ultimate owner of the proposed Pinehurst Circle extension, an Access Permit Application will be required for this connection from EPC with them being the Permittee and the developer being the Applicant.
- j. Walker Rd/Road A connection: Request for access is being proposed to make connection to Walker Rd., an EPC controlled roadway. The site plan shows connection to Walker Rd. via a newly proposed roadway, "Road A" with a "T" intersection. CDOT supports EPC with the roundabout option to be installed in phase I.
- k. Special consideration will need to be given in the design of the Walker Rd. and Road A intersection for the allowance of the re-alignment of Shannon Rd.
- I. SH83/Walker Rd. Signalized Intersection Improvements: With undetermined options and further study being requested for the intersections of Pinehurst Circle/SH83 connection and the Road A/Walker Rd. connection, it is not feasible to fully understand the impacts and the effects of the additional traffic and roadway configurations at the existing SH83 and Walker Rd. intersection. It is anticipated that auxiliary lane configurations will be required for this intersection and extensive intersection improvements will be required in phase I.
- m. A revised TIS is being requested to show the impacts of the allowable options mentioned.

#### Other considerations:

- n. Traffic Impacts from the existing development of Walden Preserve filing 4-7 will need to be added to the revised Traffic Impact Study.
- o. Four additional studies being requested for adoption into the Access Permit Offer require a revised Traffic Impact Study and is being requested are:
  - 1. Right-In only impacts to the intersection of SH83/Walker Rd. and how the traffic impacts to this and the surrounding intersections with suggestions on how to treat.
  - 2. Provide study information for the suggested roundabout at the connection of Pinehurst Circle and "Road A" impacts and how to treat.
  - 3. Full study of a roundabout at Road A and the connection with Walker Rd and how it impacts the intersection of SH83/Walker Rd. with suggestions of how to treat.
  - 4. Study of future phases and how they impact the surrounding intersections mentioned in items 1-3.
- p. CDOT requires that all escrow funds from previous Access Permits from Walden Way be fulfilled and worksheets be updated from previous Access Permit requirements with regard to the developer's other interests of Walden Way AP#215017. CDOT requests that El Paso County withhold all Certificates of Occupancy for Walden Preserve and Monument Academy developments until such time is fulfilled.

# Traffic Operations comments:

 a. Comments are from the review of Traffic Impact Study dated August 15, 2019, prepared by LSC Transportation Consultants, Inc.



- b. The proposed right-in from Highway 83 to Pinehurst Circle does not create any significant problem to the highway. There is a slight benefit to allowing this right-in movement in regards to Walker Rd by removing unnecessary eastbound traffic particularly in the event of high-intensity growth 2040 scenario as depicted in the report appendix.
- c. The proposed right-out from Pinehurst to Highway 83 does create a significant operational or safety weave problem due to the proximity to the left turn lane at the intersection of SH83/Highway 105/Walker Rd. This problem would be exacerbated in the event of highway widening. Alternate access is recommented and accomplished via Road A and Walker Road connection.
- d. The proposed east & west left turn lanes at Hwy 83 & Walker Rd would be required with Phase 1 instead of Phase 2.
- e. **INTERNAL INTERSECTION:** In consideration of the right-in and no-out for Pinhurst Circle at Hwy 83, the development should control the eastbound movement at Road A & Pinehurst Circle with stop sign and yield-controlled channelized right to facilitate SB-left and WB-right uncontrolled "free" movements. Suggestion of a min roundabout is suggested here.
- f. **FUTURE CONCERNS:** El Paso County has identified Highway 83 south of SH83/Highway 105/Walker Rd intersection for potential widening to 4 lanes in the future. Additional thru lanes would exacerbate the potential weave between Pinehurst Circle and SH83/Highway 105/Walker Rd. on Highway 83 if Right In/Right Out is allowed and would likely need to be closed/removed or reconfigured.
- g. With the close proximity to I-25, it is unlikely Highway 83 will ever become a freeway. However, the ever-growing traffic volumes and critical nature of the link between Denver and Colorado Springs may create a desire to provide a robust secondary option in the form of an expressway. This potentially may create a desire at the intersection of Highway 83 and Highway 105/Walker Rd to eliminate signal phases (such as left turns) or the entire signal with a grade-separated interchange and utilizing right-in/right-out access points such as the one proposed at Pinehurst Circle and Highway 83.
- h. Table 8, item#13 seems to refer to another intersection than Highway 83 & Pinehurst, please revise.
- i. The two-way-stop-control of Road A & Walker Rd assumes a PHF of 55%. Checking CDOT counts for similar location of Vineland Middle School in Pueblo County the PHF only falls to 70%. With YMCA included in the Monument Academy property, it is unlikely PHF would be lower. Please check and revise.
- j. The Synchro reports for short-term scenarios are not consistent with the lane configuration proposed. Please revise in the updated TIS.

## **Hydraulic comments:**

- a. Comments are from the review of Master Development Drainage Plan & Final Drainage Report, dated February 8, 2019 (Revised July 12, 2019), prepared by JSP Engineering.
- b. <u>Some drainage comments not addressed by the revised July Drainage Plan and submittals.</u>
- c. Drainage Report/Grading Plans, Discrepancy in culvert size under US 83 between drainage report and grading and erosion plan. Please verify size. Drainage plans show as 24" and pond sheet in grading plan shows 18".



- d. Drainage Report/Grading Plan, Pond M3 Pond spillway elevation given on pond sheet, but grading does not reflect spillway. At the height show, this pond exceeds 10' in height and could be classified as a jurisdictional dam. Please show grading of spillway to avoid this. Also, please provide detail of spillway and material used. Use of UDFCD spillway design guidance recommended. Not verified in the latest drainage submittal, please address and communicate back to CDOT.
- e. Drainage Report, understanding that Pond M3 is designed to discharge at historic rates, please confirm the culvert crossing US 83 is sized properly to handle flows from the pond outlet along with the additional flows from the roadside ditches.
- f. Drainage Report, Forebay size required = .011 ac-ft., size provided in UD-BMP spreadsheet = 0.005, reviewer calculated = .007. Please increase forebay size to meet minimum required. Not verified in the latest drainage submittal, please address and communicate back to CDOT.
- g. <u>Grading and Erosion Plan, show grading of channel that drains to Pond M3 (channel M2.3A)</u>. Not verified in the latest drainage submittal, please address and communicate back to CDOT.
- h. Provide pond maintenance details such as schedule of maintenance activities. Note that if maintenance doesn't occur overtopping of the ponds may occur flooding the highway.
- i. Provide engineering details on the proposed collar joining the proposed extension of the existing CDOT 24" cross culvert.
- j. Extend proposed riprap at the pipe on the southern end of the project that discharges to CDOT ROW all the way to the proposed extension of the existing CDOT 24" CDOT cross culvert.
- k. Provide engineering details on the proposed collar joining the proposed extension of the existing CDOT 24" cross culvert.
- Include in the construction work, clean existing 24" culvert that receives outflow from Pond M3.
- m. Extend proposed riprap at outlet of Pond M3 to connect to the new extension of the existing CDOT cross culvert.
- n. Drainage plans not provided. Type of pipe for culvert extensions not noted.

## Additionally,

- a. On-premise and off-premise signing shall comply with the current Colorado Outdoor Advertising Act, sections 43-1-401 to 421, C.R.S., and all rules and regulations pertaining to outdoor advertising. Please contact Mr. Todd Ausbun at 719-696-1403 for any questions regarding advertising devices.
- b. Any utility work within the state highway right of way will require a utility permit from the CDOT. Information for obtaining a utility permit can also be obtained by contacting Mr. Ausbun.

If you have any questions regarding access, please contact me in Pueblo at 719-546-5732.

Sincerely,

Arthur Gonzales R2 - Access Manager



re: Monument Academy Site Dev Plan - PPR199 - Walden YMCA - SITE

SH 83 El Paso County

Xc: Jeff Hodson, LSC Transportation Consultants, Inc.

John Schwab, JPS Engineering

Ferguson/Stecklein

Bauer

Whittlef/Biren

Sword/Ausbun - file

