Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: Residence Inn Cedar Park						**2. Regulated Entity No.:** RN109804765			
3. Customer Name: CP MAIN STREET LLC						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**			3.27
9. Application Fee:	$4,000		**10. Permanent BMP(s):**			EAPP 11–03021001A			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Williamson		**14. Watershed:**			Brushy Creek			

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin XCedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	__	__	__	__	__
Region (1 req.)	__	__	__	__	__
County(ies)	__	__	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Jen Henderson, PE Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 11/5/2024

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

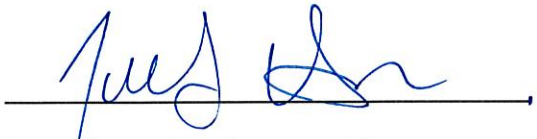
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Modification of a Previously Approved Contributing Zone Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Jen Henderson, PE

Date: 11/5/2024

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: Residence Inn Cedar Park
   Original Regulated Entity Name: Cedar Park Town Center & Discovery Boulevard
   Assigned Regulated Entity Number(s) (RN): RN109804765
   Edwards Aquifer Protection Program ID Number(s): 11–03021001A
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☒ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters**. A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):

☐ Any physical or operational modification of any best management practices or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
☒ Any change in the nature or character of the regulated activity from that which was originally approved;
☐ A change that would significantly impact the ability to prevent pollution of the Edwards Aquifer and hydrologically connected surface water; or
☐ Any development of land previously identified in a contributing zone plan as undeveloped.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres		3.27
Type of Development		
Number of Residential Lots		
Impervious Cover (acres)		
Impervious Cover (%)	70%	62%
Permanent BMPs		
Other		

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs		
Other		

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs		
Other		

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved,

including previous modifications, and how this proposed modification will change the approved plan.

6. [X] **Attachment C: Current Site Plan of the Approved Projec**t. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - [ ] The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - [ ] The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - [ ] The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - [ ] The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - [ ] The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. [ ] Acreage has not been added to or removed from the approved plan.
   [X] Acreage has been added to or removed from the approved plan and is discussed in *Attachment B: Narrative of Proposed Modification*.

8. [X] Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

HPE
Civil Engineering

Attachment A - Original Approval Letter and Approved Modification Letter

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 25, 2013

Mr. Michael Ainbinder
Cedar Park Town Center, LP
2415 West Alabama, Suite 205
Houston, Texas 77098

Re: Edwards Aquifer, Williamson County
Cedar Park Town Center Subdivision Improvements, Northwest corner of East Whitestone Boulevard and US 183A, Cedar Park, Texas
Request for an Approval of a Contributing Zone Plan (CZP)
30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer
Edwards Aquifer Protection Program (EAPP) ID No. 11-13010301

Dear Mr. Ainbinder:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP application for the above-referenced project submitted to the Austin Regional Office by Kimley-Horn and Associates, Inc. on behalf of Cedar Park Town Center, LP on January 3, 2013. Final review of the CZP was completed after additional materials were received on February 22, 2013. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas licensed professional engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas licensed professional engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

Cedar Park Town Center Subdivision Improvements (site) is to be a commercial shopping area located on the Edwards Aquifer Contributing Zone. The project is located at the northwest corner of East Whitestone Boulevard and US 183A in the Cedar Park Downtown District.

The site is 49.1 acres which will occur in stages. The grading, utility construction and infrastructure improvements will occur across all lots. The Costco addition, Lot 8, will occur first in the final development. Each lot with the exception of Lots 6 & 12 will have a building and parking within. Lot 6 will contain a path/sidewalk. In addition, offsite improvements include 3 driveways from US 183A.

PERMANENT POLLUTION ABATEMENT MEASURES

Runoff from the site will be directed to an existing wet pond and continues to be maintained by the City of Cedar Park. New BMPs are not provided.

The wet pond is Pond B as approved in EAPP 11-03021001A on May 30, 2003 with a minimum water quality volume of 536,502 cf, and a normal pool elevation of 920 ft. Engineering calculations and plans sealed by Brian Reis, P.E., demonstrate the system is sized appropriately and can accommodate the created load.

SPECIAL CONDITIONS

I. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

II. No impervious cover is allowed on Lot 12, and no turn lanes or driveway improvements along FM 1431 (East Whitestone Boulevard) are allowed, without further approvals from the TCEQ.

III. A staging area was not proposed for this project. If the contractor desires a staging area, information indicating the proposed location and placement of appropriate temporary erosion and sedimentation controls must be submitted to the TCEQ for review and approved prior to its installation.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e.,

Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.

Prior to Commencement of Construction:

3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved CZP and this notice of approval shall be maintained at the project location until all regulated activities are completed.

4. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.

6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

7. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

8. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from

becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

9. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

10. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

11. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

12. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment.

<u>After Completion of Construction:</u>

13. Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas licensed professional engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.

14. The City of Cedar Park shall be responsible for maintaining the permanent BMPs until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

15. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved CZP. If the new owner intends to commence any new regulated activity on the site, a new CZP that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

16. A CZP approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

17. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Kevin Lee Smith, P.E. of the Edwards Aquifer Protection Program of the Austin Regional Office at 512-339-2929.

Sincerely,

Carolyn Runyon, Water Section Manager
Austin Region Office
Texas Commission on Environmental Quality

CDR/kls

Enclosure: Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: The Honorable Dan A. Gattis, County Judge, Williamson County
Mr. Joe M. England, P.E., County Engineer, Williamson County
Mr. Sam Roberts, P.E., Director of Public Works, City of Cedar Park
Mr. Brian Parker, P.E., Kimley-Horn and Associates, Inc., Austin
TCEQ Central Records, Building F, MC 212

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Attachment B - Narrative of Proposed Modification

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Civil Engineering

Narrative of Proposed Modification

The CZP for the Cedar Park Town Center and Discovery Boulevard, EAPP 11–03021001A, had water quality and detention ponds sized for the entire development. The area is called SP5 in the report, which is 288.8 acres in size with 173.3 acres of impervious cover, which gives an impervious cover percentage of 60%. This area is further divided into subareas, which have different impervious cover percentages. Subareas 5a, 5b, and 5c have an impervious cover percentage of 70%, and Subareas 5d, 5e, 5f, and 5g have an impervious cover percentage of 40% – 50%. The project property lies within the subareas 5b and 5c, which gives an approved impervious cover percentage of 70% as the existing site conditions.

The Residence Inn site plan proposes adding a 5 story, 120 room hotel with a patio and pool, a parking lot with 5 ADA spaces with 130 spaces total, two driveways where one access Discovery Boulevard and the other access Main Street, and associated sidewalks and utilities. The proposed impervious cover of the project site is 62%.

The proposed modification to the approved plan is to allow this property to be developed and to reflect this reduction of impervious cover relative to what was approved. The approved impervious cover is 70% and the proposed impervious cover is 62%. Since the proposed impervious cover is below what is approved, no change will need to be made to the regional water quality and detention ponds associated with 11-03021001A.

This change will impact the ability of the previously approved plan to prevent pollution of the Edwards Aquifer. However, the impact will be a positive one, for this proposed modification reduces the impervious cover on the property compared to what was originally planned.

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Attachment C - Current Site Plan of the Approved Project

SUBAREAS 5a, 5b, 5c
IMPERVIOUS
COVER=70%

SUBAREAS 5d, 5e, 5f, 5g
IMPERVIOUS COVER
RANGES FROM 40%-50%

FUTURE
US
183-A
HWY

CO. RD. 180

U.S. HIGHWAY 183

SOUTHERN PACIFIC RAILROAD

R.M. 1431 (200' R.O.W.)

0 150 450
300 600

LEGEND

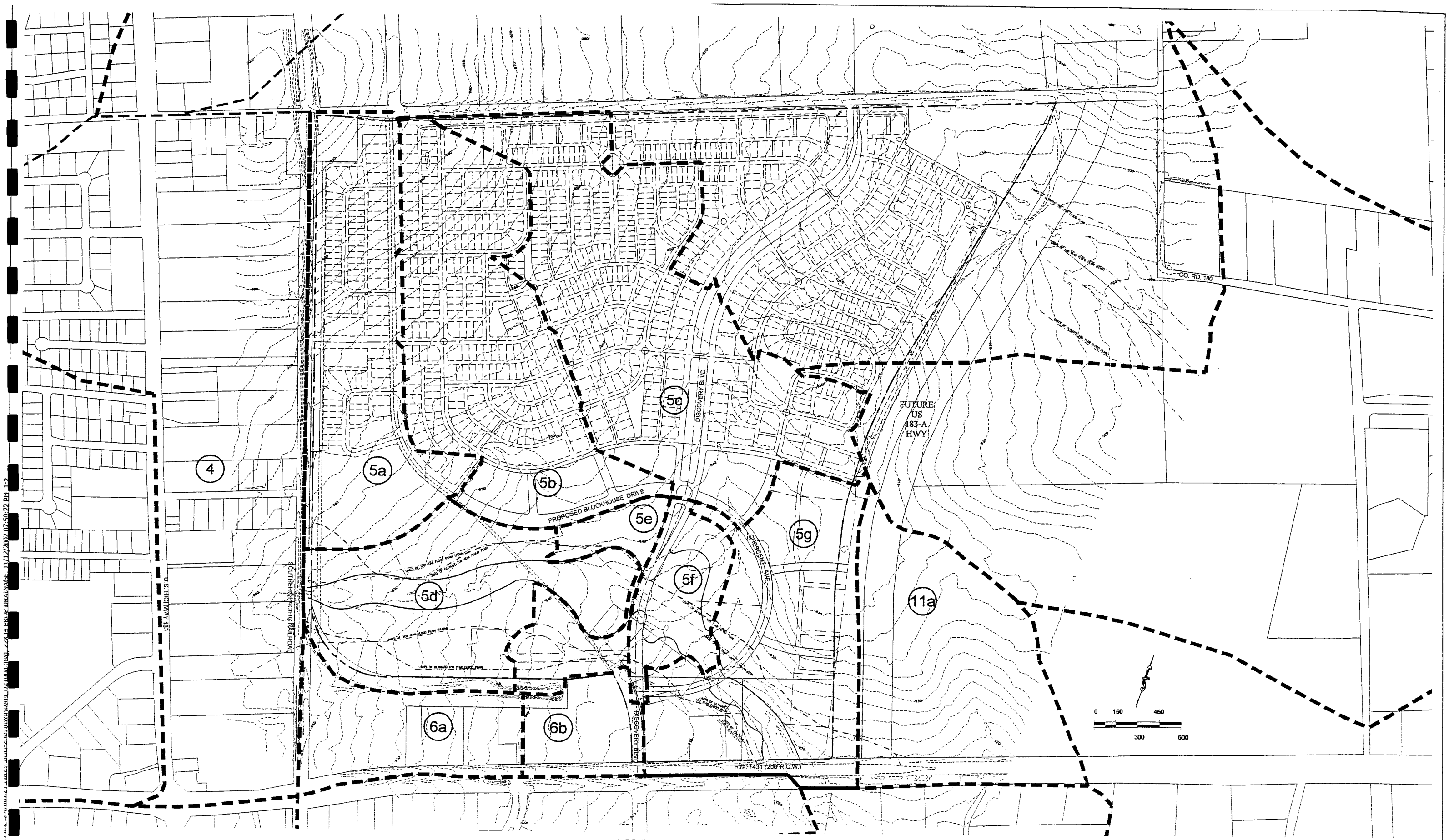
———	PROJECT BOUNDARY
- - -	REVISED SUB AREA BOUNDARY
	ORIGINAL SUB AREA BOUNDARY

Espey Consultants, Inc.
Environmental & Engineering Services

EXHIBIT
SITE DRAINAGE AREA MAP - PROPOSED
CEDAR PARK
DOWNTOWN TIRZ

FEBRUARY 2003

PROJECT NUMBER 2004



LEGEND

	PROJECT BOUNDARY
	SUB AREA BOUNDARY
Xx	SUB AREA ID

Espey Consultants, Inc.
Environmental & Engineering Services

EXHIBIT # 4
SITE DRAINAGE AREA MAP - PROPOSED
CEDAR PARK
DOWNTOWN TIRZ

NOVEMBER 2002

PROJECT NUMBER 2004

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Contributing Zone Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Jen Henderson, PE

Date: 11/5/2024

Signature of Customer/Agent:

Regulated Entity Name: Residence Inn Cedar Park

Project Information

1. County: Williamson
2. Stream Basin: Brushy Creek
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

   Contact Person: _____
   Entity: CP MAIN STREET LLC
   Mailing Address: 1401 Holliday St #426
   City, State: Wichita Falls Zip: 76301
   Telephone: 956-702-4111 Fax: _____
   Email Address: DDENMAN@WORTHHOTELS.COM

5. Agent/Representative (If any):

Contact Person: Jen Henderson, P.E.
Entity: Henderson Professional Engineers
Mailing Address: 600 Round Rock West Drive, Suite 604
City, State: Round Rock, Texas Zip: 78681
Telephone: 737-203-8953 Fax: _____
Email Address: HPE@HendersonPE.com

6. Project Location:

[X] The project site is located inside the city limits of Cedar Park.
[ ] The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
[ ] The project site is not located within any city's limits or ETJ.

7. [X] The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

1410 Main Street, Cedar Park, TX 78613

8. [X] **Attachment A - Road Map**. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

9. [X] **Attachment B - USGS Quadrangle Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:

[X] Project site boundaries.
[X] USGS Quadrangle Name(s).

10. [X] **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

[X] Area of the site
[X] Offsite areas
[X] Impervious cover
[X] Permanent BMP(s)
[X] Proposed site use
[X] Site history
[X] Previous development
[X] Area(s) to be demolished

11. Existing project site conditions are noted below:

[ ] Existing commercial site
[ ] Existing industrial site
[ ] Existing residential site

☐ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

☐ Residential: # of Lots: _____
☐ Residential: # of Living Unit Equivalents: _____
☒ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 3.27 Acres

Total disturbed area: 2.93 Acres

14. Estimated projected population: N/A

15. The amount and type of impervious cover expected after construction is complete is shown below:

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	*Sq. Ft.*	*Sq. Ft./Acre*	*Acres*
Structures/Rooftops	24,027	÷ 43,560 =	0.552
Parking	58,000	÷ 43,560 =	1.331
Other paved surfaces	6,400	÷ 43,560 =	0.147
Total Impervious Cover	88,427	÷ 43,560 =	2.03

Total Impervious Cover 2.03 **÷ Total Acreage** 3.27 **X 100 =** 62 **% Impervious Cover**

16. ☒ **Attachment D - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

17. ☒ Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☒ N/A

18. Type of project:

- ☐ TXDOT road project.
- ☐ County road or roads built to county specifications.
- ☐ City thoroughfare or roads to be dedicated to a municipality.
- ☐ Street or road providing access to private driveways.

19. Type of pavement or road surface to be used:

- ☐ Concrete
- ☐ Asphaltic concrete pavement
- ☐ Other: _____

20. Right of Way (R.O.W.):

Length of R.O.W.: _____ feet.
Width of R.O.W.: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

21. Pavement Area:

Length of pavement area: _____ feet.
Width of pavement area: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

22. ☐ A rest stop will be included in this project.

☐ A rest stop will not be included in this project.

23. ☐ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

24. ☒ **Attachment E - Volume and Character of Stormwater**. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

25. ☐ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☒ N/A

26. Wastewater will be disposed of by:

☐ On-Site Sewage Facility (OSSF/Septic Tank):

☐ **Attachment F - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☒ Sewage Collection System (Sewer Lines): Cedar Park Wastewater

The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☒ Existing.

☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☒ N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

☐ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

☐ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☐ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☐ Tanks clearly labeled
☐ Piping clearly labeled
☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

34. ☒ The Site Plan must have a minimum scale of 1" = 400'.

    Site Plan Scale: 1" = 30 '.

35. 100-year floodplain boundaries:

    ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☒ No part of the project site is located within the 100-year floodplain.

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA map panel 48491C0464F effective December 20, 2019.

36. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

    ☐ The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

38. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

39. ☒ Areas of soil disturbance and areas which will not be disturbed.

40. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

41. ☒ Locations where soil stabilization practices are expected to occur.

42. ☐ Surface waters (including wetlands).

    ☒ N/A

43. ☐ Locations where stormwater discharges to surface water.

    ☒ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

47. ☒ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

☐ N/A

48. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____.

☐ N/A

49. ☒ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

☐ N/A

50. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.

☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.

☒ The site will not be used for low density single-family residential development.

51. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

- ☐ **Attachment I - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
- ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
- ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

- ☐ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
- ☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
- ☒ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. ☒ **Attachment K - BMPs for On-site Stormwater**.

- ☐ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
- ☒ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

54. ☐ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

- ☒ N/A

55. ☐ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☒ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

    ☒ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☒ Signed by the owner or responsible party
    ☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
    ☒ Contains a discussion of record keeping procedures

    ☐ N/A

57. ☐ **Attachment O - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

58. ☐ **Attachment P - Measures for Minimizing Surface Stream Contamination**. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.

    ☒ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

59. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

60. ☒ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development,

or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

61. [X] Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

62. [X] Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

63. [X] The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

[X] The Temporary Stormwater Section (TCEQ-0602) is included with the application.

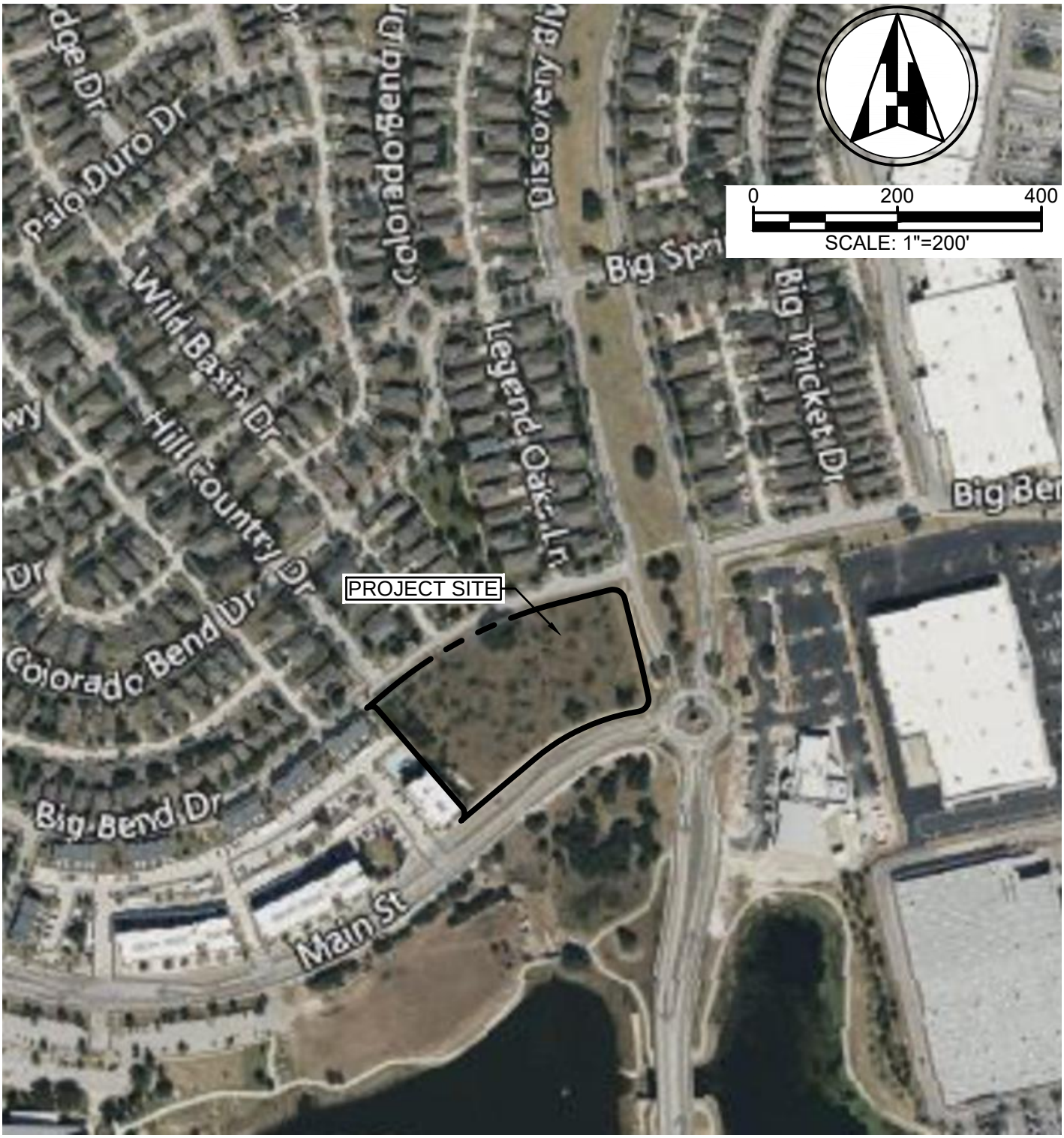


EXHIBIT
TO SERVE

RESIDENCE INN CP

1410 MAIN STREET
CEDAR PARK, TX 78613

ROAD MAP

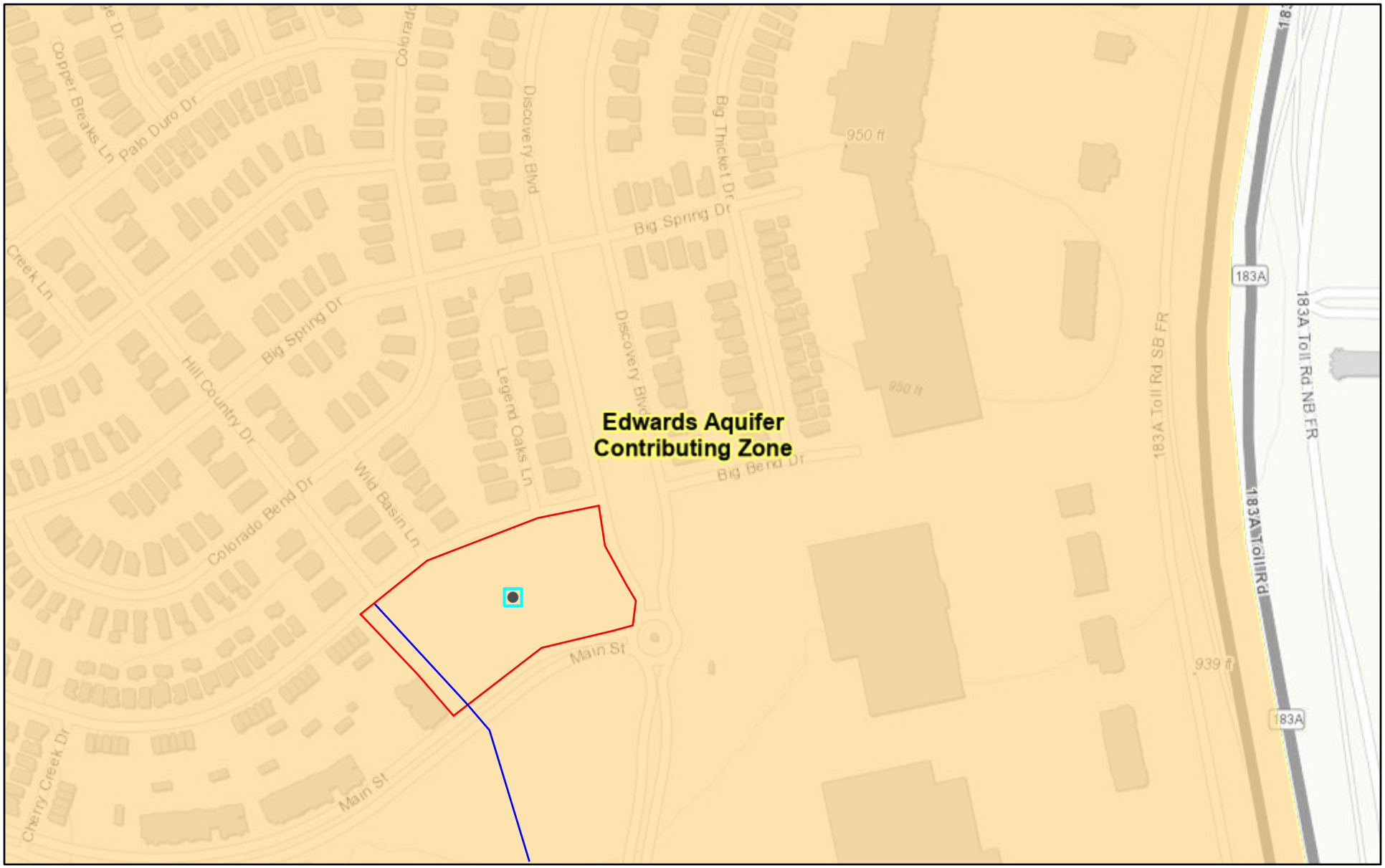
Henderson Professional Engineers

HPE Civil Engineering

600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com

WBE210166 | HUB 1853873845300

Edwards Aquifer Viewer Custom Print



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0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

Edwards Aquifer Label

City/Place

TX Counties

7.5 Minute Quad Grid

TCEQ_EDWARDS_OFFICIAL_MAPS

Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA, TCEQ

Web AppBuilder for ArcGIS

Attachment C - Project Narrative

The project site is 3.27 acres located at the located northwest of the roundabout at the intersection of Discovery Boulevard and Main Street. The address is 1410 Main Street, Cedar Park, TX 78613. The project site is located within the city limits of the City of Cedar Park, Williamson County, Texas. No portion of the project site is located in the 1% annual chance (100-year) floodplain per the FEMA map panel 48491C0464F effective December 20, 2019. The project site is located within the Edwards Aquifer Contributing Zone. Hydrologic soil group information came from digital information served by the United States Department of Agriculture Natural Resources Conservation Service through the Web Soil Survey 2.0 portal. The project site is entirely type ‘D’ soil.

The project site is currently undeveloped land. There is an existing drainage channel on the west side of the property, which directs flows towards the regional detention and water quality pond in the south. Trees present on the property are the densest around the existing drainage channel on the west side. The land is primarily an open field with grass, brush, and trees. The existing impervious cover of the project site is 0.25% and the proposed is 62%.

The proposed development of this project includes adding an 5 story, 120 room hotel with a patio and pool, a parking lot with 5 ADA spaces with 130 spaces total, two driveways where one access Discovery Boulevard and the other access Main Street, and associated sidewalks and utilities. Detention and water quality will be handled by the regional water quality and detention ponds south of the site, the said ponds are associated with EAPP 11–03021001A.

Attachment D - Factors Affecting Surface Water Quality

The construction activities associated with the Residence Inn plan of development could result in additional Total Suspended Solids (TSS) loads during the construction of the site improvements. This potential increased locating will be mitigated with the use of silt fencing that is to be along the perimeter of the active construction areas and the placement of stabilized construction entrances at the entrance(s) of the project. Rock berms may be used in areas of concentrated flows during construction activities. Inlet protection may be used for existing and proposed inlets.

The overall impervious cover of the site will be close to 62%, 2.03-acres of the 3.27-acre site. The runoff from the site will be treated by the regional water quality basin, which will protect the water quality of the Brushy Creek.

Attachment E - Volume and Character of Stormwater

There are two points of interest on the project site that was used for drainage modeling, Analysis 1 in the southeast corner and Analysis 2 at the southwest corner at the end of the existing drainage channel on the property.

The peak storm water before construction for Residence Inn improvements has been calculated to be 17.029 cfs for the 25-yr storm event and 23.881 cfs for the 100-yr storm event at Analysis 1 and 3.293 cfs for the 25-yr storm event and 5.99 cfs for the 100-yr storm event at Analysis 2. This is given that the project site is currently 3.27 acres of land that is open space in fair condition over soils group D at 1 - 8 percent slopes and a percent impervious cover close to 0.25%. The character of existing runoff is that of undeveloped land in proximity to residential and commercial developments.

After construction the character of the runoff will change such that hydrocarbon residues from vehicles, buildings, and other contamination typical of a hotel may be present. The peak storm water discharges post-construction has been calculated to be 1.267 cfs for the 25-yr storm event and 1.77 cfs for the 100-yr storm event at Analysis 1 and 27.97 cfs for the 25-yr storm event and 37.771 cfs for the 100-yr storm event at Analysis 2. This is given that the proposed impervious cover percentage is close to 62%.

The CZP for the Cedar Park Town Center and Discovery Boulevard, EAPP 11–03021001A, had regional water quality and detention ponds sized for an area that the project site lies within. The area is called SP5 in the report, which is 288.8 acres in size with 173.3 acres of impervious cover, which gives an impervious cover percentage of 60%. This area is further divided into subareas, which have different impervious cover percentages. Subareas 5a, 5b, and 5c have an impervious cover percentage of 70%, and Subareas 5d, 5e, 5f, and 5g have an impervious cover percentage of 40% – 50%.

The project property lies within the subareas 5b and 5c, and which gives a maximum of 70% impervious cover before requiring on-site BMPs. The project site plan proposes a percent impervious cover of 62%, therefore it is completely accounted for in the existing regional water quality and detention ponds that serve the area that the property resides in. Therefore, water quality and detention will not be necessary for the site.

Detailed calculations will be shown within the construction plan set sheet set.

HPE
Civil Engineering

Attachment J - BMPs for Upgradient Stormwater

No BMPs for upgradient stormwater runoff will be necessary with the proposed development. They flow through the existing drainage channel on the property, which leads to the existing regional water quality and detention ponds that serve the area.

Attachment K - BMPs for On-site Stormwater

No BMPs for on-site stormwater runoff will be necessary with the proposed development.

The CZP for the Cedar Park Town Center and Discovery Boulevard, EAPP 11–03021001A, had water quality and detention ponds sized for the entire development. The area is called SP5 in the report, which is 288.8 acres in size with 173.3 acres of impervious cover, which gives an impervious cover percentage of 60%. This area is further divided into subareas, which have different impervious cover percentages. Subareas 5a, 5b, and 5c have an impervious cover percentage of 70%, and Subareas 5d, 5e, 5f, and 5g have an impervious cover percentage of 40% – 50%.

The project property lies within the subareas 5b and 5c, and which gives a maximum of 70% impervious cover before requiring on-site BMPs. The project site plan proposes a percent impervious cover of 62%, therefore it is completely accounted for in the existing regional water quality and detention ponds that serve the area that the property resides in.

HPE
Civil Engineering

Attachment N - Inspection, Maintenance, Repair and Retrofit Plan

ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

Chapter 3.5.11 of the TCEQ "Edwards Aquifer Technical Guidance Manual" is attached. This explains all of the routine and non-routine maintenance and inspections associated with the wet basin pond.

The Cedar Park Health System, L.P. will be responsible for operation and maintenance of the wet basin pond after the improvements have been constructed and accepted. All inspections, maintenance and repair will be documented and accurate records of maintenance and repair work shall be kept by Cedar Park Health Systems, L.P.

I, Dr. David Klein, authorized representative for Cedar Park Health System, L.P., the owner of the wet basin pond tract, have read these procedures and am aware that these items need to be taken care of in order to keep the wet basin pond functioning properly.

Signature

8/28/06
Date

3.5.11 Wet Basins

A clear requirement for wet basins is that a firm commitment be made to carry out both routine and non-routine maintenance tasks. The nature of the maintenance requirements are outlined below, along with design tips that can help to reduce the maintenance burden (modified from Young et al., 1996).

Routine Maintenance.

- *Mowing.* The side-slopes, embankment, and emergency spillway of the basin should be mowed at least twice a year to prevent woody growth and control weeds.

- *Inspections.* Wet basins should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. When possible, inspections should be conducted during wet weather to determine if the basin is functioning properly. There are many functions and characteristics of these BMPs that should be inspected. The embankment should be checked for subsidence, erosion, leakage, cracking, and tree growth. The condition of the emergency spillway should be checked. The inlet, barrel, and outlet should be inspected for clogging. The adequacy of upstream and downstream channel erosion protection measures should be checked. Stability of the side slopes should be checked. Modifications to the basin structure and contributing watershed should be evaluated. During semi-annual inspections, replace any dead or displaced vegetation. Replanting of various species of wetland vegetation may be required at first, until a viable mix of species is established. Cracks, voids and undermining should be patched/filled to prevent additional structural damage. Trees and root systems should be removed to prevent growth in cracks and joints that can cause structural damage. The inspections should be carried out with as-built pond plans in hand.

- *Debris and Litter Removal.* As part of periodic mowing operations and inspections, debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the riser, and the outlet should be checked for possible clogging.

- *Erosion Control.* The basin side slopes, emergency spillway, and embankment all may periodically suffer from slumping and erosion. Corrective measures such as regrading and revegetation may be necessary. Similarly, the riprap protecting the channel near the outlet may need to be repaired or replaced.

- *Nuisance Control.* Most public agencies surveyed indicate that control of insects, weeds, odors, and algae may be needed in some ponds. Nuisance control is probably the most frequent maintenance item demanded by local residents. If the ponds are properly sized and vegetated, these problems should be rare in wet ponds except under extremely dry weather conditions. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.). Biological control of algae and mosquitoes using fish such as fathead minnows is preferable to chemical applications.

Non-routine maintenance.

- *Structural Repairs and Replacement.* Eventually, the various inlet/outlet and riser works in the wet basin will deteriorate and must be replaced. Some public works experts have estimated that corrugated metal pipe (CMP) has a useful life of about 25 yr, while concrete barrels and risers may last from 50 to 75 yr. The actual life depends on the type of soil, pH of runoff, and other factors. Polyvinyl chloride (PVC) pipe is a corrosion resistant alternative to metal and concrete pipes. Local experience typically determines which materials are best suited to the site conditions. Leakage or seepage of water through the embankment can be avoided if the embankment has been constructed of impermeable material, has been compacted, and if anti-seep collars are used around the barrel. Correction of any of these design flaws is difficult.

- *Sediment Removal.* Wet ponds will eventually accumulate enough sediment to significantly reduce storage capacity of the permanent pool. As might be expected, the accumulated sediment can reduce both the appearance and pollutant removal performance of the pond. Sediment accumulated in the sediment forebay area should be removed from the facility every two years to prevent accumulation in the permanent pool. Dredging of the permanent pool should occur at least every 20 years, or when accumulation of sediment impairs functioning of the outlet structure.

- *Harvesting.* If vegetation is present on the fringes or in the pond, it can be periodically harvested and the clippings removed to provide export of nutrients and to prevent the basin from filling with decaying organic matter.

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

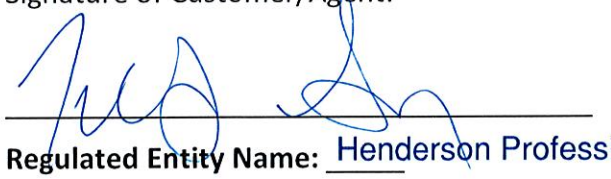
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Jen Henderson, PE

Date: 09/26/2024

Signature of Customer/Agent:



Regulated Entity Name: Henderson Professional Engineers

Project Information

Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

   ☐ The following fuels and/or hazardous substances will be stored on the site: _____

   These fuels and/or hazardous substances will be stored in:

   ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

5. ☒ **Attachment C - Sequence of Major Activities**. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.

   ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: EAPP 11–03021001A

Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

7. ☒ **Attachment D – Temporary Best Management Practices and Measures**. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

- [X] A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
- [X] A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
- [X] A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
- [X] A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. [X] The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

   - [ ] **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
   - [X] There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. [X] **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. [X] **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

    - [ ] For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
    - [ ] For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
    - [ ] For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
    - [ ] There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

[X] There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. [ ] **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

    [X] N/A

12. [X] **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. [X] All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. [X] If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. [X] Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. [X] Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. [X] **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**. A schedule of the interim and permanent soil stabilization practices for the site is attached.

18. [X] Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. [X] Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. [X] All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. [X] If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. [X] Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

Attachment A – Spill Response Actions

The first steps that should be taken in the event of a spill are keeping people safe, identifying what has been spilled, and determining if warning signs are needed. The next step is to call the State of Texas Spill-Reporting Hotline and the SERC: 1-800-832-8224 no later than 24 hours after the discovery of the spill or discharge. The local TCEQ office shall also be contacted at 512-339-2929. All clean-up will follow the Spill Prevention and Control guidance outlined in Chapter 327 of the Texas Administrative Code.

Reasonable Response Actions:

1. Arrival of the responsible person or response personnel hired by the responsible person at the time of the discharge/spill
2. Make an effort to stop the spill or discharge
3. Minimizing the impact of the spill on public health and the environment
4. Neutralizing the effects of the incident
5. Removing the discharged or spilled substances
6. Managing the wastes

Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in **40 CFR 302.4** (PDF)	**30 TAC 327**
	into water	"Final RQ" or 100 lbs, whichever is **less**	
Any oil	coastal waters	as required by the Texas General Land Office	**Texas General Land Office**
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	**30 TAC 327**
	directly into water	enough to create a sheen	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	**30 TAC 327**
	onto land, or onto land from a non-exempt PST facility	25 gallons	
	directly into water	enough to create a sheen	
Associated with the exploration, development and production of oil, gas, or geothermal resources	under the jurisdiction of the Railroad Commission of Texas	as required by the Railroad Commission of Texas	**Railroad Commission of Texas**
Industrial solid waste or other substances	into water	100 lbs	**30 TAC 327**
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	**30 TAC 334** .75-81
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under **40 CFR 302**	**30 TAC 327**
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	**30 TAC 327**

https://www.tceq.texas.gov/response/spills/spill_rq.html

If a spill or accidental discharge is to occur it will be promptly contained by the responsible persons. Any spills will be excavated and properly disposed of.

Attachment B – Potential Sources of Contamination

There are a few potential sources of contamination with the construction of this project. A potential source of contamination is fuel for the equipment that will be utilized for excavation and other construction activities on the site. Concrete paving as well as a concrete curb and gutter will also take place on the site to construct the building, driveways, and parking lot. Paving can introduce a potential for surface water contamination.

Attachment C – Sequence of Major Activities

Below is a list of the major activities that will take place for the site development. The nearest drainage channel ultimately discharges into a regional water quality and detention pond.

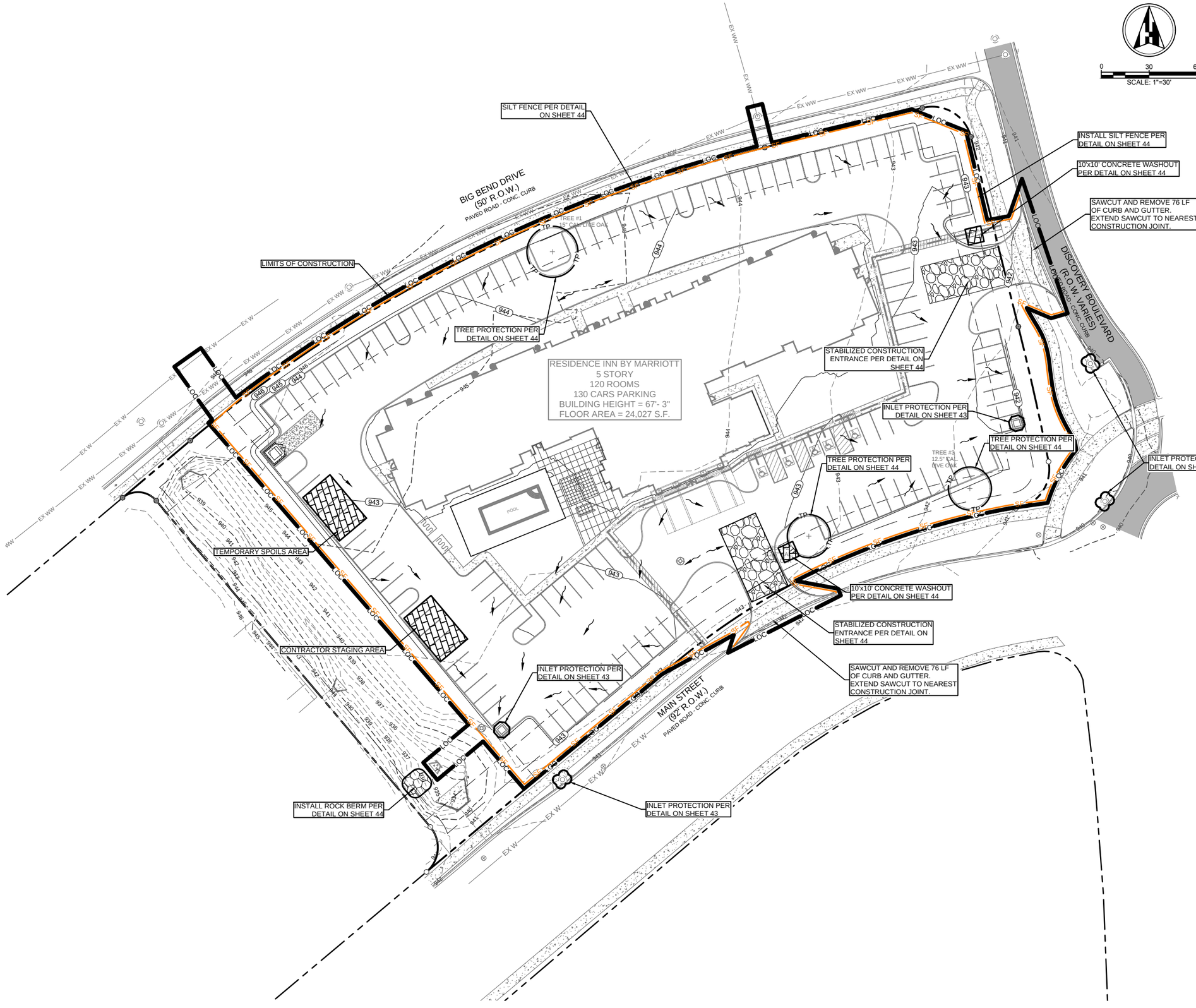
1. There will be clearing and grubbing where the construction will take place. Approximately 2.93 acres of the site will be cleared of brush and trees. Silt fence will be put in place along the perimeter of the limits of construction as well as inlet protection for on-site and nearby existing inlets to ensure that any soil loosened in the process will be contained on the site in the event of a storm. Tree protection will be installed before other trees are removed.
2. Excavation and utility installation will take place after the clearing and grubbing. The silt fence will still be in place from the initial installation and will be inspected to ensure it is still intact. Any damaged portions will be removed and replaced. A stabilized construction entrance will be used to prevent track out from the site.
3. After the utilities are installed the construction of the buildings, parking lots, driveways, and other developments will proceed. All previously mentioned erosion and sediment controls will be incorporated into the site development. Additional silt fencing will be put in place downstream if necessary. A concrete washout will be utilized for concrete waste.

Attachment D – Temporary Best Management Practices and Measures

Several temporary BMPs will be utilized on the project site. A silt fence will be placed along the perimeter of the site to prevent flows from picking up sediment and discharging from the site. A stabilized construction entrance will also be provided in order to prevent any vehicles entering or exiting the site from tracking out sediment into the street. Inlet protection will be utilized to prevent sediment from flowing into storm sewers. Flows from the site will be contained in order to prevent them from entering surface streams, sensitive features, or the aquifer. There have not been any naturally occurring or manmade sensitive features identified on the site by the geologic survey.

HPE
Civil Engineering

Attachment F – Structural Practices



LEGEND	
LOC	LIMITS OF CONSTRUCTION (3.03 Ac.)
	ROCK CHECK DAM
	INLET PROTECTION (EXISTING CURB INLET)
	INLET PROTECTION (PROPOSED INLET)
SF	SILT FENCE
CF	CONSTRUCTION FENCE
FD	FILTER DIKE
TP	TREE PROTECTION FENCE
	FLOW ARROW

NOTES:
1. NO ENVIRONMENTALLY SENSITIVE AREAS ARE LOCATED ON OR DOWNSTREAM OF THIS PROJECT SITE.
2. THIS PROJECT WILL NOT REQUIRE ANY FORM OF PHASING OR SLOPE STABILIZATION.
3. REFER TO LANDSCAPE PLANS FOR RESEEDING AND REVEGETATION REQUIREMENTS.
4. NO PERMANENT EROSION CONTROL MEASURES WILL BE INSTALLED WITH THIS PROJECT.
5. REFER TO SHEET 44 FOR STANDARD DETAILS - ESC.
6. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
7. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.
8. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
9. ALL DISTURBED AREAS SHALL BE RE-VEGETATED TO MEET THE REQUIREMENTS OF THE CITY OF CEDAR PARK'S ORDINANCES.
10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY INSPECTOR AT TIME OF CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF EXISTING POND DURING ALL CONSTRUCTION ACTIVITY PRIOR TO FINAL CERTIFICATE OF OCCUPANCY. COORDINATE WITH THE CITY OF CEDAR PARK'S STORMWATER COORDINATOR, DENNIS NIELSEN AT (512) 401-5359
12. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING PRIOR TO SCHEDULING THE PRECONSTRUCTION MEETING: CONSTRUCTION GENERAL PERMIT AND NOTICE OF INTENT TO CITY'S MS4 COORDINATOR (DENNIS NEILSON), UPLOAD CGP & NOI TO MGO, AND POST ON-SITE WITH SWPPP.
13. CONTRACTOR TO KEEP EXISTING SIDEWALK PATHWAY CLEAR AND USABLE DURING CONTRUCTION OF THE PROJECT.

Henderson Professional Engineers
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com
Civil Engineering
WBE2101066 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
RESIDENCE INN CP
1410 MAIN STREET
CEDAR PARK, TX 78613

EROSION AND SEDIMENTATION CONTROL PLAN

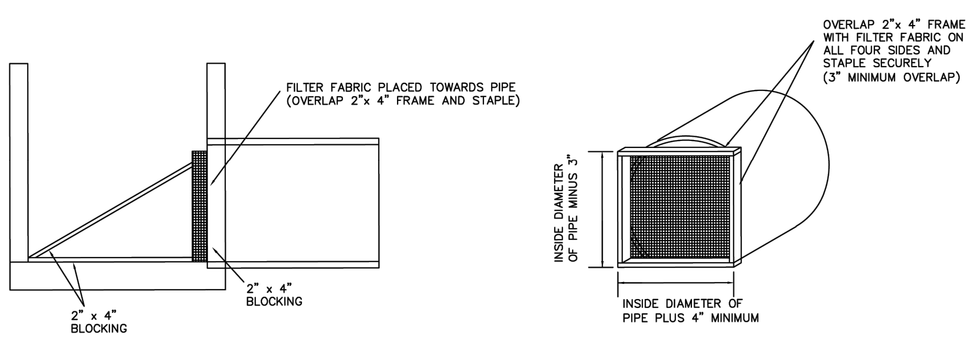
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
10/21/2024

PROJECT NO. 231201	10/21/2024	DRAWN BY: JS	CHECKED BY: AR	APPROVED BY: JH

SHEET 12 OF 52

CITY PERMIT NUMBER **2024-18-SD**

Plotted by: Dell Pro 3630, Plot date: 21/10/2024
File name: h:\02_projects\2023\231201 residence inn\07 Sheet\SD\231201 EROSION AND SEDIMENTATION CONTROL PLAN.dwg



NOTES:
STORM INLET SEDIMENT TRAPS SHALL BE PLACED IN ALL PROPOSED CURB INLETS AND AREA INLETS AS DIRECTED BY THE CITY OF CEDAR PARK'S PROJECT REPRESENTATIVE.

THE LATERAL BRACING SHALL BE PLACED IN A MANNER AS TO ADEQUATELY SECURE THE FILTER FRAME TO THE SIDE OF THE INLET, INSURING THE PROPER FUNCTION OF THE SEDIMENT TRAP.

FILTER FABRIC MAY BE IDENTICAL TO THAT SPECIFIED AS "TEMPORARY SEDIMENT CONTROL FENCE". OTHER MATERIAL MAY BE USED UPON APPROVAL OF THE CITY OF CEDAR PARK'S PROJECT REPRESENTATIVE.

THE "STORM INLET SEDIMENT TRAPS" SHALL BE INSTALLED UPON COMPLETION OF THE PROPOSED INLET WALLS OR AS DIRECTED BY THE CITY OF CEDAR PARK'S PROJECT REPRESENTATIVE.

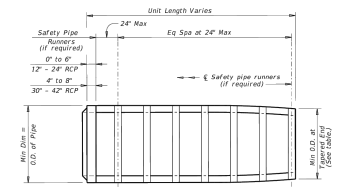
THE CONTRACTOR WILL BE REQUIRED TO PERFORM PERIODIC MAINTENANCE OF THE SEDIMENT TRAP AND REMOVE ACCUMULATED SILT AS DIRECTED BY THE CITY OF CEDAR PARK'S PROJECT REPRESENTATIVE.

"STORM INLET SEDIMENT TRAPS" SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE PROPOSED INLET DECK BEGINS.

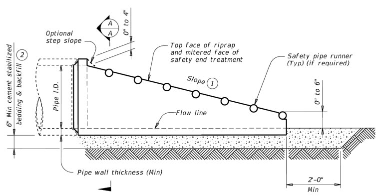
ALL WOOD SHALL BE PRESSURE TREATED.

STORM INLET SEDIMENT TRAP

CITY OF CEDAR PARK PUBLIC WORKS ENGINEERING	STANDARD DETAIL STORM INLET SEDIMENT TRAP
DARWIN MARCHELL, P.E.	ADOPTED: 01/02/01 SCALE: NTS INITIAL:



PLAN VIEW - 12" THRU 24"
(Showing spigot end connection)

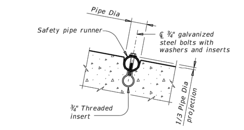


LONGITUDINAL ELEVATION - 12" THRU 24"
(Showing spigot end connection)

1. Slope as shown elsewhere in the plans. Slope of 6:1 or flatter is required for vehicle safety.
2. Provide cement stabilized bedding and backfill in accordance with the Item, "Excavation and Backfill for Structures." Bedding and backfill is considered subsidiary to the Item 467, "Safety End Treatment." When concrete riprap is specified around the safety end treatment, backfill as directed by Engineer.
3. Fill the top 4" of void between precast end treatments with concrete riprap. Concrete riprap is considered subsidiary to the Item 467, "Safety End Treatment."
4. Adjust clear distance between pipes to provide for the minimum distance between safety end treatments.
5. Safety pipe runners are required for multiple pipe culverts with more than two pipes.

REQUIREMENTS FOR CULVERT PIPES AND SAFETY PIPE RUNNERS

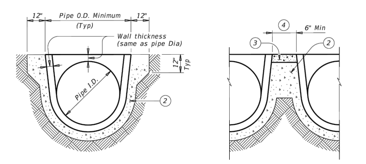
Pipe I.D.	Min Wall Thickness	Min O.D.	Min O.D. at Tapered End	Min Reinf Requirements (sq. in. per ft. of Pipe)	Max Slope	Min Length of Unit	Pipe Runner Requirements: Single Pipe	Pipe Runner Requirements: Multiple Pipe	Required Pipe Runner Sizes: Nominal Dia	O.D.	I.D.
12"	2"	16"	16"	0.07 Circ.	6:1	4' – 0"	No	(5)	3" STD	3.500"	3.068"
15"	2 ¼"	19 ½"	19"	0.07 Circ.	6:1	5' – 8"	No	(5)	3" STD	3.500"	3.068"
18"	2 ½"	23"	21 ½"	0.07 Circ.	6:1	7' – 3"	No	(5)	3" STD	3.500"	3.068"
24"	3"	30"	27"	0.07 Circ.	6:1	10' – 6"	No	(5)	3" STD	3.500"	3.068"
30"	3 ½"	37"	31"	0.18 Circ.	6:1	12' – 1"	No	Yes	4" STD	4.500"	4.026"
36"	4"	44"	36"	0.19 Ellip.	6:1	15' – 4"	Yes	Yes	4" STD	4.500"	4.026"
42"	4 ½"	51"	41 ½"	0.23 Ellip.	6:1	18' – 7"	Yes	Yes	4" STD	4.500"	4.026"



INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS
(If required)

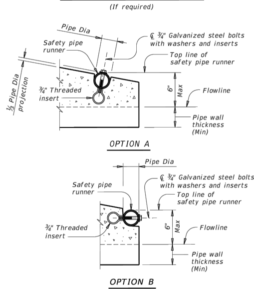
MATERIAL NOTES:
Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.
Provide pipe runners meeting the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5LX52.
Galvanize steel components except reinforcing steel after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

GENERAL NOTES:
Precast safety end treatment for reinforced concrete pipe (RCP) may be used for TYPE II end treatment as specified in Item 467, "Safety End Treatment."
When precast safety end treatment is used as a Contractor's alternate to mitered RCP, riprap will not be required unless noted otherwise on the plans.
Manufacture precast concrete end sections in accordance with Item 464, "Reinforced Concrete Pipe" and in accordance with ASTM Specification C-76, Class III, Wall B for circular pipe.
Provide precast concrete end sections with a spigot or bell end for compatibility to upstream or downstream end conditions with sufficient annular space to allow for grout, mortar, cold applied asphalt joint compound or pre-formed plastic gasket material.
Methods of lifting shall be provided by the manufacturer for ease of loading, unloading and installation.
Pipe runners are designed for a traversing load of 10,000 Lbs at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.



SECTION A-A

MULTIPLE PIPE INSTALLATION



OPTION A

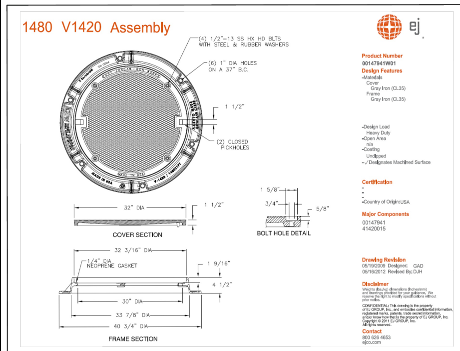
OPTION B

END DETAILS FOR INSTALLATION OF SAFETY PIPE RUNNERS
(If required)

Texas Department of Transportation — Bridge Division Standard

PRECAST SAFETY END TREATMENT
TYPE II ~ PARALLEL DRAINAGE

PSET-RP

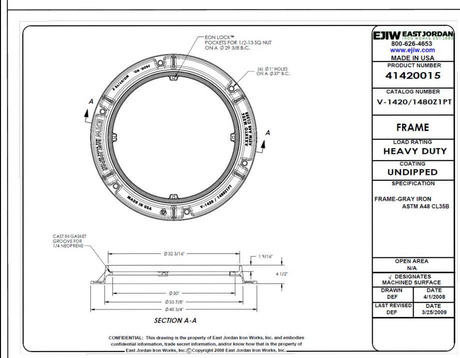


1480 V1420 Assembly

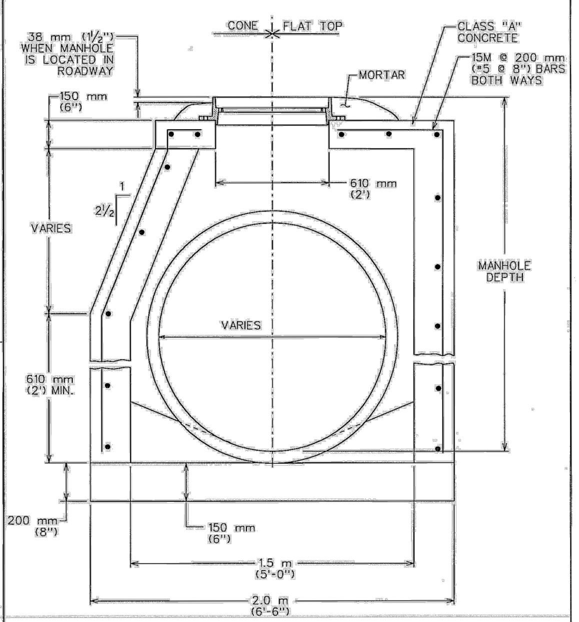
Notes:

Product shall be East Jordan Iron Works V-1420, Product Number 00147941W01, or approved equal.

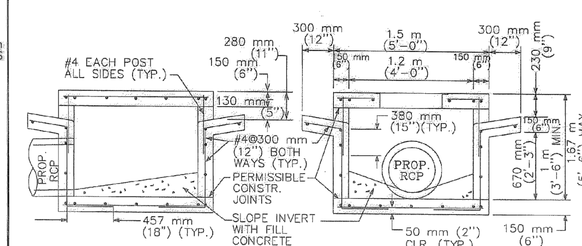
All Manhole covers shall read "CITY OF CEDAR PARK" and "SANITARY SEWER" or "STORM SEWER", whichever is appropriate.



CITY OF CEDAR PARK ENGINEERING DEPARTMENT	MANHOLE RING AND COVER OUTSIDE OF PAVED AREAS	
DARWIN MARCHELL 09/02/16 APPROVED DATE	ADOPTED: 09/02/2016 SCALE: N.T.S. INITIAL:	1 OF 1

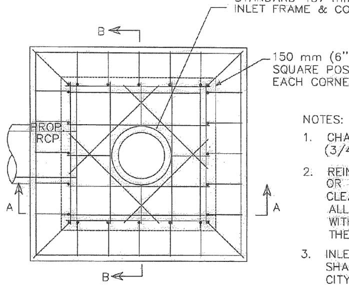


CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE DETAIL	
ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-11



ELEVATION–SECTION A–A

ELEVATION–SECTION B–B

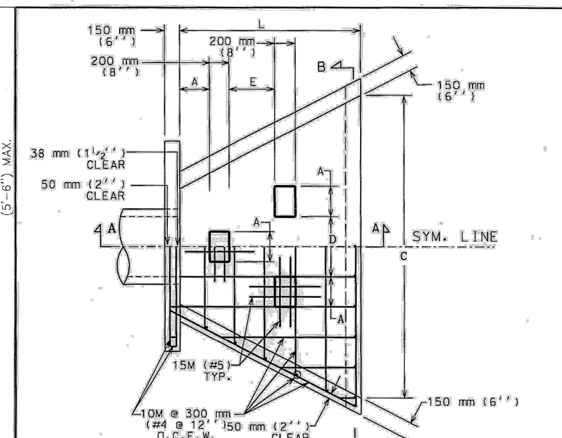


PLAN

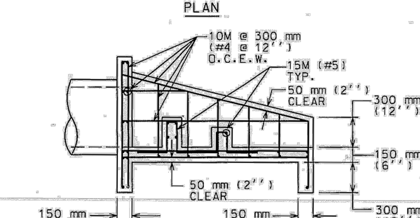
N.T.S.

NOTES:
1. CHAMFER ALL EXPOSED EDGES 20 mm (3/4").
2. REINFORCING STEEL SHALL BE CUT OR FIELD–BENT AS REQUIRED TO CLEAR PIPE AND MANHOLE OPENING. ALL CUT STEEL SHALL BE REPLACED WITH ADDITIONAL DIAGONAL BARS OF THE SAME DIAMETER.
3. INLET FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S–1.
4. CONCRETE COVERAGE OF STEEL SHALL BE 50 mm (2") MIN. AT ALL SURFACES.
5. ANY MODIFICATION TO THIS STANDARD SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	4-SIDED AREA INLET	
2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-9

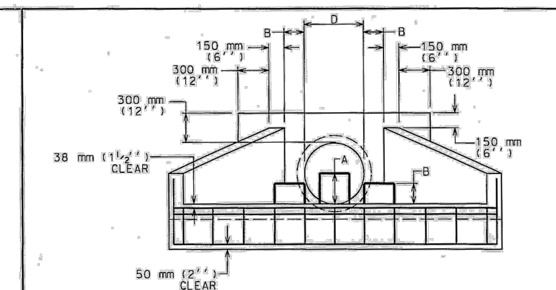


PLAN



SECTION A–A

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD HEADWALL AND ENERGY DISSIPATORS	
8/20/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-13 1 OF 2



SECTION B–B

NOTES:
1. ALL CONCRETE SHALL BE TYPE "C" AS PER SPEC. 403S. CONCRETE FOR STURCTURES.
2. CHAMFER ALL EXTERNAL VISIBLE CORNERS.
3. DISSIPATOR BLOCKS REQUIRED ON DISCHARGE HEADWALLS ONLY.

D	457 mm (18")	533 mm (21")	610 mm (24")	685 mm (27")	765 mm (30")	838 mm (33")	914 mm (36")	1.067 m (42")	1.219 m (48")	1.372 m (54")	1.524 m (60")
A	225 mm (9")	250 mm (10")	300 mm (12")	350 mm (14")	375 mm (15")	400 mm (16")	450 mm (18")	525 mm (21")	600 mm (24")	675 mm (27")	750 mm (30")
B	150 mm (6")	175 mm (7")	200 mm (8")	225 mm (9")	250 mm (10")	275 mm (11")	300 mm (12")	350 mm (14")	400 mm (16")	450 mm (18")	500 mm (20")
C	2.29 m (90")	2.67 m (105")	3.05 m (120")	343 m (135")	3.81 m (150")	4.19 m (165")	4.57 m (180")	5.33 m (210")	6.10 m (240")	6.86 m (270")	7.62 m (300")
L	1.37 m (54")	1.60 m (63")	1.83 m (72")	2.06 m (81")	2.29 m (90")	2.51 m (99")	2.74 m (108")	3.20 m (126")	3.66 m (144")	4.11 m (162")	4.57 m (180")
E	300 mm (12")	350 mm (14")	400 mm (16")	450 mm (18")	500 mm (20")	550 mm (22")	600 mm (24")	700 mm (28")	800m (32")	900 mm (36")	1000 mm (40")

DIMENSIONS IN MILLIMETERS. METERS AND (INCHES).

DISCHARGE VELOCITIES GREATER THAN 3 METERS/SECOND (10 fps) REQUIRE ROCK OUTLET PROTECTION.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD HEADWALL AND ENERGY DISSIPATORS	
8/20/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-13 2 OF 2

WOMEN OWNED — CERTIFIED BY WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

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HPE Civil Engineering
600 ROUND ROCK WEST DRIVE, SUITE 604
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PELS FIRM #F-22208
www.hendersonpe.com
WBE210166 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
RESIDENCE INN CP
1410 MAIN STREET
CEDAR PARK, TX 78613

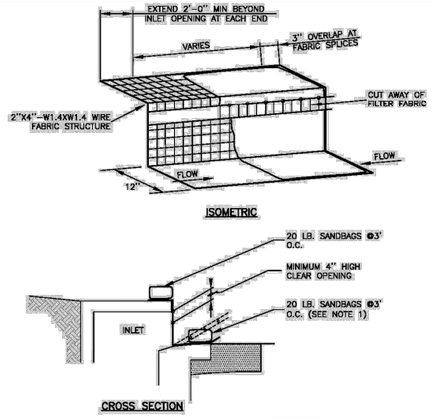
STANDARD DETAILS - STORM

STATE OF TEXAS — JENNIFER L. HENDERSON — 116883 — LICENSED PROFESSIONAL ENGINEER — 10/21/2024

PROJECT NO. 231201 | 10/21/2024 | DRAWN BY: JS | CHECKED BY: AR | APPROVED BY: JH

Plotted by: Dell Pre 3630, Plot date: 21/10/2024
File name: h:\02 projects\2023\231201 residence inn\07 Sheet\SD\231201 DETAILS.dwg

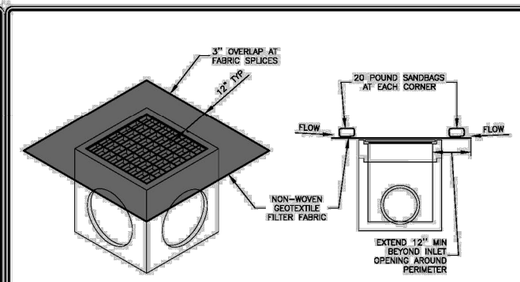
CITY PERMIT NUMBER 2024-18-SD



NOTES:

1. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM-WATER BEGINS TO OVERTOP THE CURB.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

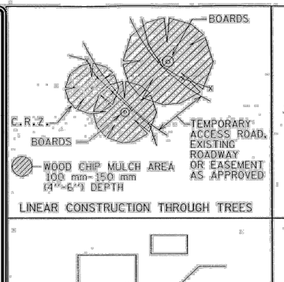
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC-14
APPROVED 03-25-11 DATE	CURB INLET PROTECTION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

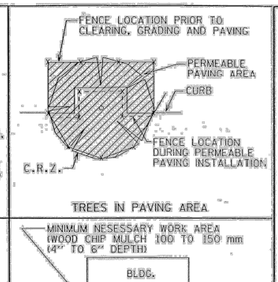


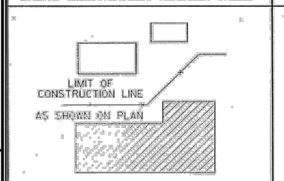
NOTES:

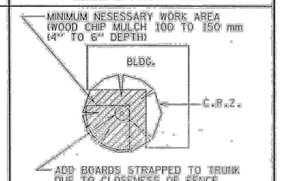
1. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
2. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY CLEAN THE INLET PROTECTION IF EXCESSIVE PONDING OCCURS.
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

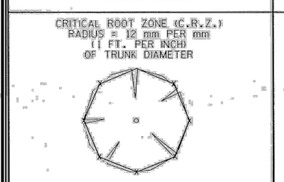
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC-15
APPROVED 03-25-11 DATE	AREA INLET PROTECTION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

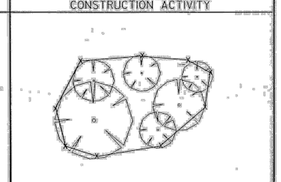




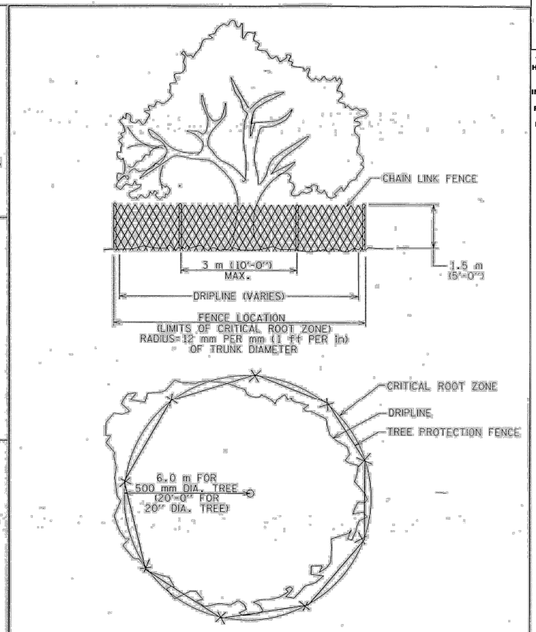




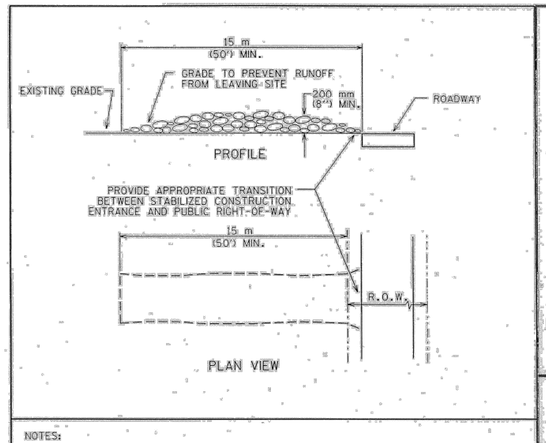




CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	
11/3/22 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-1



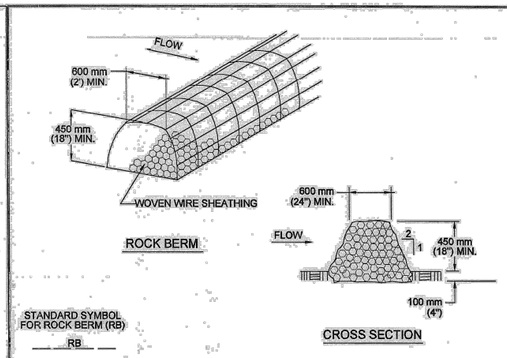
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROPTECTION FENCE TYPE A - CHAIN LINK	
11/3/22 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-2



NOTES:

1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



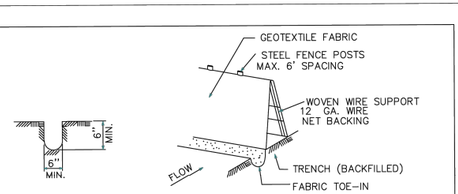
STANDARD SYMBOL FOR ROCK BERM (RB)

RB

NOTES:

1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



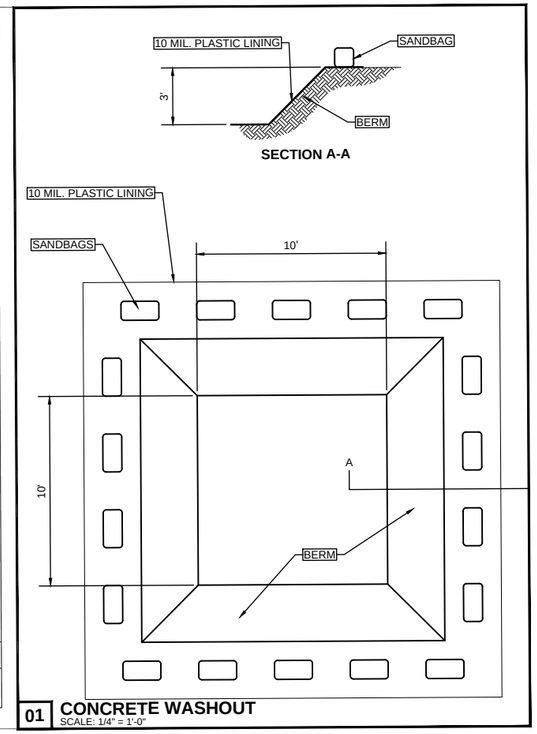
GENERAL NOTES:

1. SILT FENCE LOCATED ADJACENT TO PLAYGROUNDS, PARKS, SIDEWALKS, AND OTHER LOCATIONS AS DETERMINED BY CITY OF CEDAR PARK REPRESENTATIVES SHALL HAVE CITY APPROVED SAFETY CAPS ON ALL STEEL POSTS.
2. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE.
3. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
4. WHERE FENCE CAN NOT BE TRENCHED IN (E.G. PAVEMENT) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE. 6 INCHES DEEP AND 6 INCHES WIDE TO THE TRENCH MUST BE A MINIMUM OF ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST.
6. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
7. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES.
8. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

STANDARD SYMBOL SF / L=

REV. DATE: 09/13/01

CITY OF CEDAR PARK ENGINEERING DEPARTMENT	SILT FENCE	
DARWIN MARCHELL 09/13/2001 APPROVED DATE	ADOPTED: 09/13/2001 SCALE: N.T.S. INITIAL:	



01 **CONCRETE WASHOUT**
SCALE: 1/4" = 1'-0"

Henderson Professional Engineers
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com
Civil Engineering
WBE210166 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
RESIDENCE INN CP
1410 MAIN STREET
CEDAR PARK, TX 78613

STANDARD DETAILS - ESC

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
10/21/2024

PROJECT NO. 231201	10/21/2024	DRAWN BY: JS	CHECKED BY: AR	APPROVED BY: JH

SHEET 44 OF 52

Plotted by: Dell Pro 3630, Plot date: 21/10/2024
File name: h:\02 projects\2023\231201 residence inn\07 Sheet\SD\231201 DETAILS.dwg

CITY PERMIT NUMBER **2024-18-SD**

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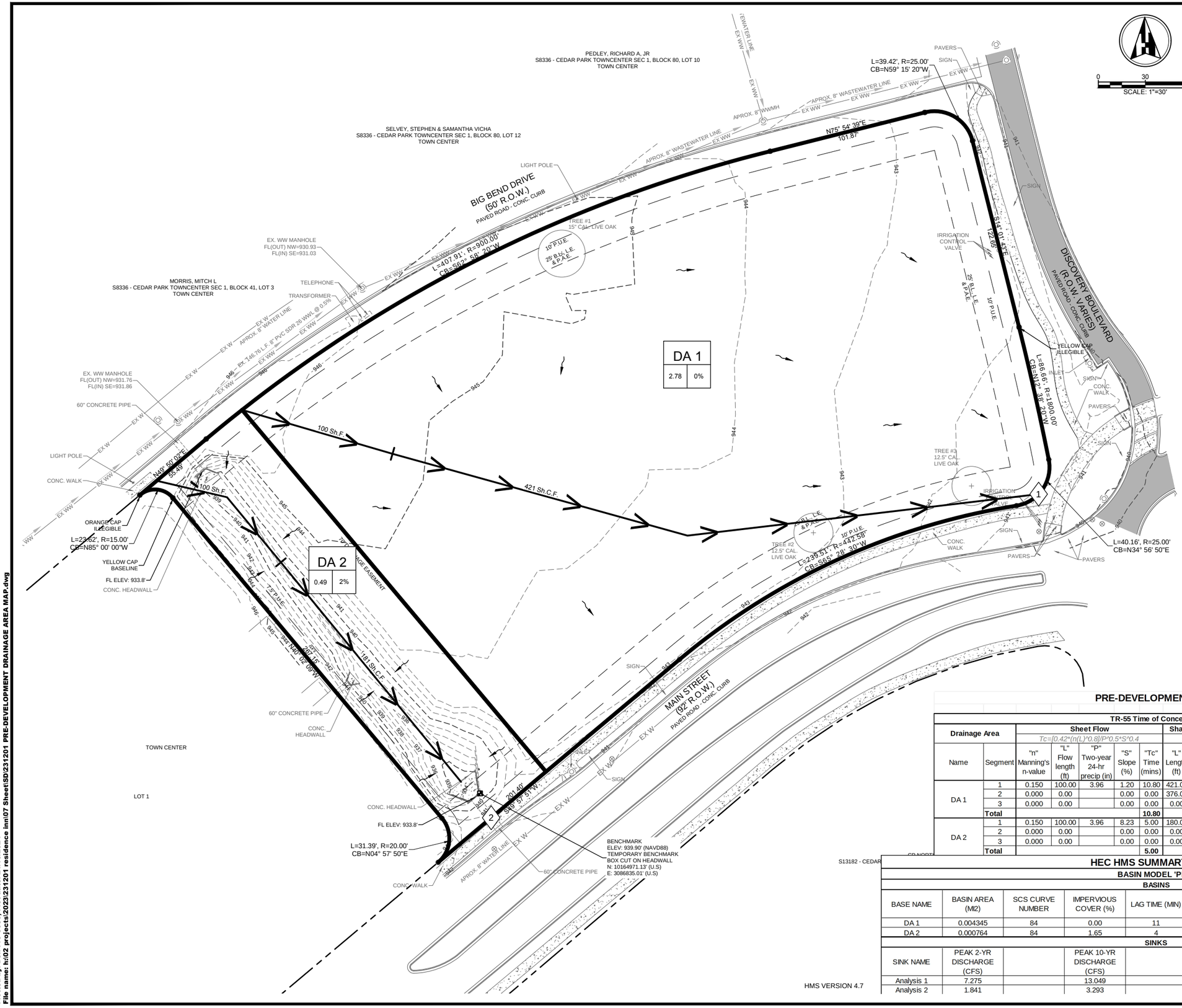
Attachment G – Drainage Area Map



LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

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1	
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SITE DEVELOPMENT PLANS TO SERVE

RESIDENCE INN CP
1410 MAIN STREET
CEDAR PARK, TX 78613

PRE-DEVELOPMENT DRAINAGE AREA MAP

PRE-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					Total Travel Time (Tc)
		Tc=[0.42*(n(L)^0.8]/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	100.00	3.96	1.20	10.80	421.00	1.20	1.77	3.97	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	376.00	1.00	2.03	3.08	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**10.80**				**7.05**					**0.00**	**18**
DA 2	1	0.150	100.00	3.96	8.23	5.00	180.00	2.45	2.53	1.19	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**5.00**				**1.19**					**0.00**	**6**

HEC HMS SUMMARY TABLE

BASIN MODEL 'PRE'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.004345	84	0.00	11	7.275	13.049	17.029	23.881
DA 2	0.000764	84	1.65	4	1.841	3.293	4.289	5.990

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)	
Analysis 1	7.275		13.049		17.029		23.881	
Analysis 2	1.841		3.293		4.289		5.990	

HMS VERSION 4.7

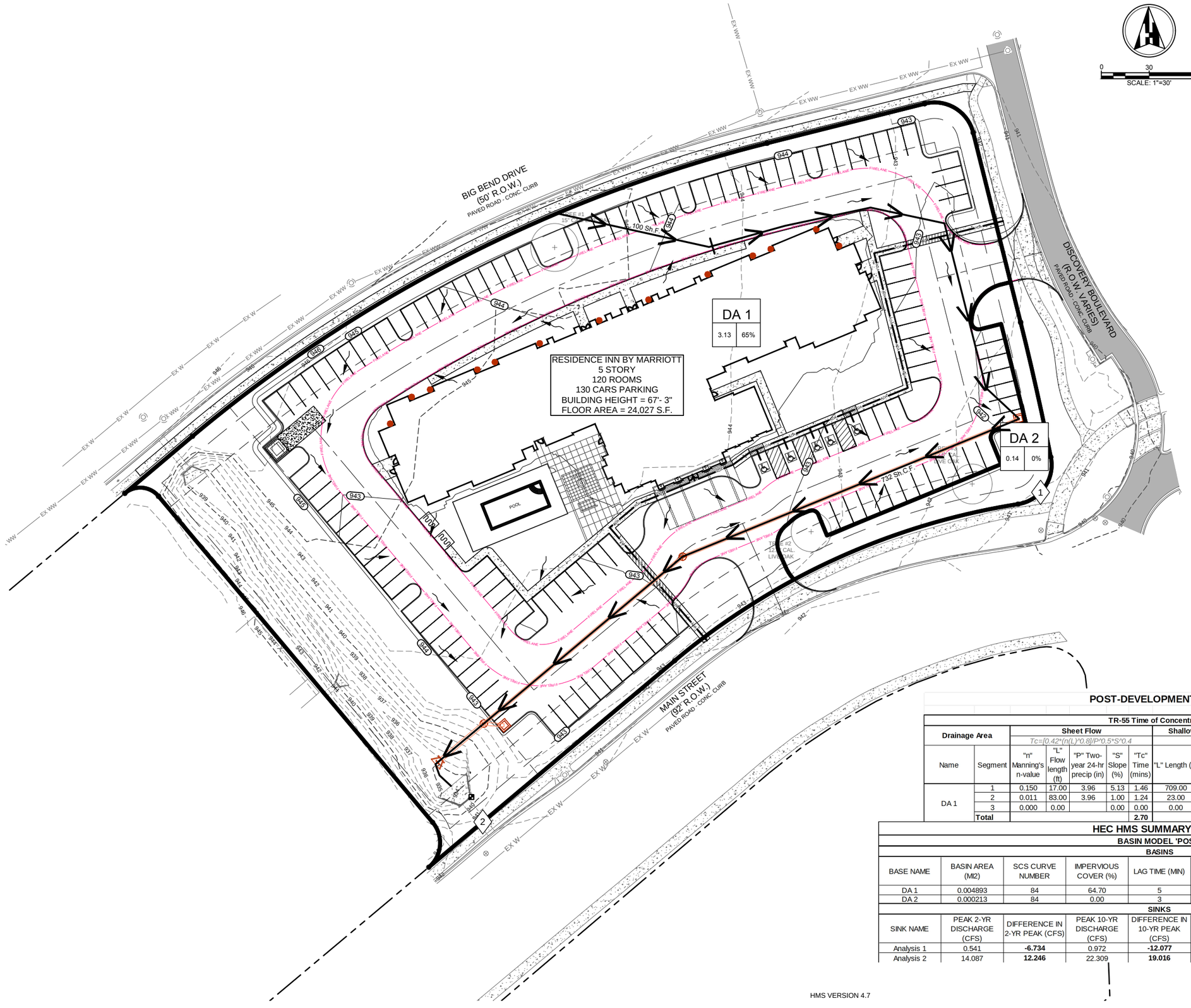
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
10/21/2024

PROJECT NO. 231201	10/21/2024	DRAWN BY: JS	CHECKED BY: AR	APPROVED BY: JH

SHEET 15 OF 52

CITY PERMIT NUMBER **2024-18-SD**

Plotted by: Dell Pre 3630, Plot date: 21/10/2024
File name: h:\02_projects\2023\231201 residence inn\07 Sheet\SD\231201 PRE-DEVELOPMENT DRAINAGE AREA MAP.dwg



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LEGEND

DA 1 / 0,90 / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF, Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

NOTES:
1. POST-DEVELOPMENT IMPERVIOUS COVER DOES NOT EXCEED MAXIMUM PERCENTAGE SET BY EAPP 11–03021001A.
2. ENGINEER HAS REVIEWED PLANS PERTAINING TO THE DESIGN OF THE EXISTING DETENTION FACILITIES AND AGREES WITH THEIR DESIGN. PROPOSED DEVELOPMENT DOES NOT ADVERSELY AFFECT ANY DOWNSTREAM PROPERTIES.

POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					
		Tc=[0.42*(n(L)^0.8]/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	17.00	3.96	5.13	1.46	709.00	1.00	2.03	5.81	0.00	0.000	0.00	0.00	0.00	
	2	0.011	83.00	3.96	1.00	1.24	23.00	8.96	4.83	0.08	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**2.70**				**5.89**					**0.00**	**9**

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.004893	84	64.70	5	14.087	22.309	27.970	37.771
DA 2	0.000213	84	0.00	3	0.541	0.972	1.267	1.770

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)
Analysis 1	0.541	**-6.734**	0.972	**-12.077**	1.267	**-15.762**	1.770	**-22.111**
Analysis 2	14.087	**12.246**	22.309	**19.016**	27.970	**23.681**	37.771	**31.781**

HMS VERSION 4.7

WOMEN OWNED
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No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS
TO SERVE
RESIDENCE INN CP
1410 MAIN STREET
CEDAR PARK, TX 78613

POST-DEVELOPMENT DRAINAGE AREA MAP

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
10/21/2024

PROJECT NO. 231201	10/21/2024	DRAWN BY: JS	CHECKED BY: AR	APPROVED BY: JH

SHEET 16 OF 52

CITY PERMIT NUMBER **2024-18-SD**

Plotted by: Dell Pro 3630, Plot date: 21/10/2024
File name: h:\02 projects\2023\231201 residence inn\07 Sheet\SD\231201 POST-DEVELOPMENT DRAINAGE AREA MAP.dwg

Attachment I – Inspection and Maintenance for BMPs

The following inspection plan has been laid out for each BMP:

1. Silt fence
    a. Silt fence will be inspected monthly and after large rainfall events to ensure there are not any compromised points. If it is found that the silt fence is damaged it will be removed and replaced with new fence.
2. Stabilized Construction Entrance
    a. A stabilized construction entrance will be provided for the site. The construction entrance will be inspected on a monthly basis. If the aggregate becomes damaged or no longer prevents track out, it will be removed and replaced with new aggregate.
3. Concrete Washout
    a. A concrete washout will be provided for any excess concrete and for truck cleaning. The washout will be inspected on a monthly basis and at the end of the day on concrete pours. Once the washout is full, it will be disposed of properly and either replaced with a new washout or emptied fully.
4. Tree Protection
    a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

The following inspection plan has been laid out for each soil stabilization practices:

1. Tree Protection
    a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.
2. Permanent Vegetation
    a. At the conclusion of construction, all disturbed areas will be re-seeded with permanent grass/vegetation.
    b. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I Doug Denman,
Print Name

President,
Title - Owner/President/Other

of CP Main Street, LLC,
Corporation/Partnership/Entity Name

have authorized Jen Henderson, P.E.
Print Name of Agent/Engineer

of Henderson Professional Engineers
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

9/9/2024
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Doug Denman known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 9th day of September, 2024

Randi Jo Culp
NOTARY PUBLIC

RANDI JO CULP
Notary ID #124421768
My Commission Expires
July 29, 2028

Randi Culp.
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 7/29/2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Residence Inn Cedar Park
Regulated Entity Location: 1410 Main Street, Cedar Park, TX 78613
Name of Customer: CP MAIN STREET LLC
Contact Person: Jen Henderson, P.E. Phone: 737-203-8953
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☒ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	3.27 Acres	$ 4,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Doug Denman Date: 9/9/2024

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN		**RN**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* | *If new Customer, enter previous Customer below:*

CP MAIN STREET LLC

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
0802875521	32065593231	82-368-5429	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	1401 HOLLIDAY ST #426						
	City	WICHITA FALLS	**State**	TX	**ZIP**	76301	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(956) 702-4111		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

RESIDENCE INN CEDAR PARK

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	1410 MAIN STREET							
	City	CEDAR PARK	**State**	TX	**ZIP**	78613	**ZIP + 4**	
24. County	WILLIAMSON							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	30.5294		**28. Longitude (W) In Decimal:**	-97.8228	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
6552		237210	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

HOTEL

34. Mailing Address:	**1401 HOLLIDAY ST #426**							
	City	**WICHITA FALLS**	**State**	**TX**	**ZIP**	**76301**	**ZIP + 4**	
35. E-Mail Address:	**DDENMAN@WORTHHOTELS.COM**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(940) 704-2474		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	JEN HENDERSON, PE	41. Title:	HPE PRESIDENT & CEO

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(737) 203-8953		( ) -	HPE@HENDERSONPE.COM

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	CP Main Street, LLC	Job Title:	President
Name *(In Print)*:	Doug Denman	Phone:	940 704-2474
Signature:		Date:	9/9/2024

Secretary of State
P.O. Box 13697
Austin, TX 78711-3697
FAX: 512/463-5709

Filing Fee: $300

Certificate of Formation
Limited Liability Company

Filed in the Office of the
Secretary of State of Texas
Filing #: 802875521 12/06/2017
Document #: 779100480002
Image Generated Electronically
for Web Filing

Article 1 - Entity Name and Type

The filing entity being formed is a limited liability company. The name of the entity is:

CP Main Street, LLC

Article 2 – Registered Agent and Registered Office

☐ A. The initial registered agent is an organization (cannot be company named above) by the name of:

OR

☑ B. The initial registered agent is an individual resident of the state whose name is set forth below:

Name:
John H Denman

C. The business address of the registered agent and the registered office address is:

Street Address:
1401 Holliday Street, Suite 426 Wichita Falls TX 76301

Consent of Registered Agent

☐ A. A copy of the consent of registered agent is attached.

OR

☑ B. The consent of the registered agent is maintained by the entity.

Article 3 - Governing Authority

☑ A. The limited liability company is to be managed by managers.

OR

☐ B. The limited liability company will not have managers. Management of the company is reserved to the members.

The names and addresses of the governing persons are set forth below:

Manager 1: **Doug Denman** Title: **Manager**

Address: **1401 Holliday Street, Suite 426 Wichita Falls TX, USA 76301**

Manager 2: **John H Denman** Title: **Manager**

Address: **1401 Holliday Street, Suite 426 Wichita Falls TX, USA 76301**

Article 4 - Purpose

The purpose for which the company is organized is for the transaction of any and all lawful business for which limited liability companies may be organized under the Texas Business Organizations Code.

Supplemental Provisions / Information

Pursuant to Section 6.202(b) of the Texas Business Organizations Code, the Members of the Limited Liability Company are authorized to take action without holding a meeting, providing notice or taking a vote, if the Members of the Limited Liability Company having at least the minimum number of votes that would be necessary to take the action that is the subject of the consent at a meeting, in which each Member of the Limited Liability Company entitled to vote on the action is present and votes, sign a written consent or consents stating the action taken

[The attached addendum, if any, is incorporated herein by reference.]

Organizer

The name and address of the organizer are set forth below.

R. Ken Hines 3711 Maplewood Ave., Suite 200, Wichita Falls, Texas 76308

Effectiveness of Filing

☑ A. This document becomes effective when the document is filed by the secretary of state.

OR

☐ B. This document becomes effective at a later date, which is not more than ninety (90) days from the date of its signing. The delayed effective date is:

Execution

The undersigned affirms that the person designated as registered agent has consented to the appointment. The undersigned signs this document subject to the penalties imposed by law for the submission of a materially false or fraudulent instrument and certifies under penalty of perjury that the undersigned is authorized under the provisions of law governing the entity to execute the filing instrument.

R. Ken Hines

Signature of Organizer

FILING OFFICE COPY